IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA

SUSAN M.	FAUST,	PH.D.	AND	NXGEN	

VECTOR SOLUTIONS, LLC : Civil Case No. ______ : Plaintiffs, :

v. : JURY TRIAL DEMANDED

THE TRUSTEES OF THE UNIVERSITY OF: PENNSYLVANIA, AND DR. JAMES: WILSON, PH. D,

Defendants.

COMPLAINT

- 1. This matter stems from the Trustees of the University of Pennsylvania ("UPenn" or "University") and Dr. James Wilson's ("Dr. Wilson"; UPenn and Dr. Wilson shall collectively be referred to herein as "Defendants") unethical and illegal conduct of concealing licensing agreements for technology invented by Plaintiffs Dr. Susan Faust ("Dr. Faust") as a post-doctoral researcher within UPenn's Gene Therapy Program ("GTP"), and her company, NxGEN Vector Solutions, LLC ("NxGEN"). By concealing the existence of licensing agreements for Dr. Faust's technology, Defendants retained all royalty payments received pursuant to those agreements, in violation of UPenn's Patent Policy ("Patent Policy"), which requires UPenn to share royalties received from licensing agreements with the inventors.
- 2. As discussed in more detail below, UPenn, at the very least, entered a licensing agreement with Biogen Inc. for twelve patents/patent applications, including Dr. Faust's technology, with a maximum value of \$2 billion. Despite its potential to receive billions of dollars under the licensing agreement, UPenn failed to even notify Dr. Faust that her technology was being licensed, let alone compensate her for the license, as required by the Patent Policy.
 - 3. In fact, Dr. Faust was the only inventor of a technology licensed to Biogen by

UPenn who was not compensated. And, although UPenn now concedes that it licensed Dr. Faust's patent application without notifying her, it is still refusing to compensate her as required under the Patent Policy. That is, while UPenn and Dr. Wilson have derived millions of dollars from licensing Dr. Faust's invention, Dr. Faust has not received any compensation in violation of the Patent Policy.

- 4. UPenn has used its money, army of attorneys, and other resources to withhold from Dr. Faust any information regarding UPenn licensing agreements that include her technology, entitling her to compensation. UPenn's complete lack of transparency regarding its licensing activities for Dr. Faust's technology another violation of its Patent Policy has resulted in uncertainty regarding just how many entities UPenn has licensed Dr. Faust's technology to and the compensation received in return. Dr. Faust, however, has independently gathered evidence indicating that UPenn has licensed her technology to multiple other third-parties, entitling her to compensation.
- 5. Defendants' misconduct towards Dr. Faust extends far beyond UPenn's failure to notify or compensate her for licensing her invention, however. More specifically, UPenn, at the direction and under the control of Dr. Wilson, has engaged in a concerted effort to deprive Dr. Faust of her life's work because it competes with technology developed and commercialized by Dr. Wilson, from which both Defendants derive significant profit annually. Accordingly, Defendants have also engaged in illegal, anticompetitive conduct to ensure that Dr. Faust is never able to commercialize the technology she invented and patented as a GTP post-doctoral researcher.
- 6. For example, UPenn, at the direction of Dr. Wilson, forfeited the international rights to Dr. Faust's patent application without ever informing her of its intent to do so. Similarly,

UPenn attempted to abandon Dr. Faust's domestic patent application, again without providing her notice in violation of the Patent Policy. After learning of UPenn's intent to abandon her patent application, Dr. Faust, at considerable expense, prosecuted the patent. UPenn, despite attempting to completely abandon the patent application before, waited until Dr. Faust had spent years of her life and a six-figure sum to be in a position to commercialize the patent, only to then block such commercialization efforts.

- 7. This is only one example. As discussed below, Defendants, for approximately a decade, have taken a variety of anti-competitive actions to sabotage Dr. Faust's attempts to commercialize her patent, conducting themselves more like an illegal monopolist than a research institution.
- 8. Much of UPenn's misconduct towards Dr. Faust was directed by Dr. Wilson, the director of GTP. Dr. Wilson is untouchable at UPenn due to his ownership of various companies that pay UPenn millions of dollars annually for access to GTP's technology, making him UPenn's "biggest client." As a result, Dr. Wilson has control of all GTP decisions and has used this authority to sabotage Dr. Faust's attempts to make use of the technology she developed over a decade ago at GTP. Simply put, UPenn protects Dr. Wilson at all costs due to his making the University tons of money over the years. He is considered the most powerful person at UPenn.
- 9. Rather than use Dr. Faust's patent to promote societal well-being, Defendants have intentionally prevented Dr. Faust from broadly commercializing it thereby ensuring that it cannot compete with Dr. Wilson's technology, that generates revenue annually for both Defendants, and that only Defendants derive any benefit from her technology, whether directly or indirectly.
- 10. As one of the most prominent non-profit, research institutions in the United States, UPenn purports to serve the public good and attracts the most talented researchers from around the

world to perform research in GTP's laboratory. Although advancing the public good may have been UPenn's mission at one time, now the University is indistinguishable from many of the for-profit companies in the private sector, concerned only with maximizing its bottom line without concern for the public good or those hurt by its conduct. Currently, however, UPenn is violating its own Patent Policy to stifle innovation in the gene therapy space by preventing Dr. Faust's competing technology, developed at GTP, from being commercialized and used broadly within the field, to protect its revenue stream from Dr. Wilson's competing patent.

- 11. UPenn's brazen disregard for its Patent Policy is astonishing for such a distinguished research university. Although UPenn's Patent Policy requires all its employees' inventions be assigned to it, the Patent Policy is also relied upon by researchers, such as Dr. Faust, when selecting a university to ensure that they will not be cut out of the commercialization of their inventions. UPenn's Patent Policy not only establishes UPenn's contractual obligation to honor the rights of its researchers but also represents UPenn's ethical obligation among those in the research community to refrain from exploiting its research staff to maximize its own profit. UPenn's failure to maintain this standard of conduct renders it the same, and in many respects worse, than for-profit companies that are openly concerned only with maximizing revenue.
- 12. UPenn, at the direction of Dr. Wilson, has violated both the plain terms and spirit of the Patent Policy to ensure that they, and not Dr. Faust, receive every dollar received from her invention while also preventing her from commercializing the technology independent of UPenn to ensure she does not compete with Dr. Wilson's technology. Dr. Faust has exhausted every possible avenue attempting to obtain information from UPenn regarding licensing agreements for her technology and to reach an agreement to allow her to commercialize her technology, to no avail. Defendants have no interest in being transparent about its licensing arrangements for Dr.

Faust's patent or allowing her to commercialize her patent, as required by its Patent Policy. Therefore, Dr. Faust brings this action against Defendants to enforce her rights under the Patent Policy, including receiving full ownership of her patented technology and all amounts rightfully owed to her as a result of UPenn licensing her technology to third-parties.

PARTIES

- 13. Plaintiff Dr. Faust is a resident of Washington, DC, who served as a postdoctoral researcher within the UPenn's GTP from 2010 until January 2013. In this position, Dr. Faust largely studied the immune response to viral vectors used in gene therapy.
- 14. Before joining UPenn, Dr. Faust received a B.S. in Microbiology from the Pennsylvania State University with minors in Biochemistry and Molecular Biology, a Ph.D. in Cellular and Molecular Biology and a concurrent Master's degree in Human Genetics from the University of Michigan.
- 15. Dr. Faust has also received numerous awards for her research, including a Young Investigator Award from the American Transplant Congress and the Sanjeev Kumar Excellence in Science Award from the University of Pennsylvania.
- 16. In 2017, Dr. Faust founded Plaintiff NxGEN, a gene therapy biotech company that received Series A and Series B investments.
- 17. Dr. Faust is an inventor of technology embodied in multiple patent applications and patents, including U.S. Patent No. 11,015,210 (the "'210 Patent"), which Defendant Dr. Wilson is also an inventor. As discussed in more detail below, the '210 Patent is co-owned by NxGEN and UPenn.
- 18. Defendant UPenn is a non-profit corporation formed under the laws of the Commonwealth of Pennsylvania and located at 3601 Walnut Street, Philadelphia, Pennsylvania

19104.

- 19. According to UPenn's website, "Formal institutional governance and fiduciary responsibility for the University of Pennsylvania rest solely with its Board of Trustees The trustees delegate the responsibility for the day-to-day management of the University of Pennsylvania to the administration and, in particular, to the president." Available at https://secretary.upenn.edu/trustees-governance.
- 20. UPenn is responsible for the GTP. According to the GTP's website, the GTP's goals "are to develop and commercialize transformative genetic-based therapeutics. These goals are driven by the unmet needs of patients with inherited genetic diseases." GTP's website also states that GTP is "the go-to organization for public and private partners who want to participate in the gene therapy space."
- 21. UPenn's Center for Tech Transfer ("CTT") (now known as UPenn Center for Innovation ("PCI")) is responsible for commercialization efforts for GTP's technology on behalf of UPenn. CTT/PCI is responsible for, among other things, entering into licensing agreements for GTP technology with third-parties and compensating the inventors of licensed technologies pursuant to UPenn's Patent Policy.
- 22. Defendant Dr. Wilson is an adult individual who is a resident of the Commonwealth of Pennsylvania and has served as GTP's director since its inception in 1993.
- 23. Dr. Wilson has complete control over all decisions relating to GTP, including staffing, research assignments, patents, and licensing. Dr. Wilson is considered to be untouchable at UPenn due to the millions of dollars he brings to the University annually through licensing agreements with companies that he owns. As a result, Dr. Wilson is viewed by UPenn as CTT's "biggest client" and is treated accordingly.

- 24. Dr. Wilson is the founder of Passage Bio, G2 Bio Companies, iECURE, RegenxBio, and Scout Bio. Upon information and belief, each of these companies has entered into a licensing agreement with UPenn.
- 25. According to its website, Passage Bio (NASDAQ: PASG) is a publicly traded genetics medicines company focused on the treatment of neurodegenerative diseases, including frontotemporal dementia, ALS, and Huntington's Disease. Passage Bio was co-founded by Dr. Wilson in 2019, and he currently serves as its Chief Scientific Officer.
- 26. The G2 Bio Companies were founded in 2021 by the University of Pennsylvania Gene Therapy Program, James Wilson, M.D., Ph.D., Tachi Yamada, M.D. and Temasek, a global investment firm headquartered in Singapore that invested \$200 million, to develop transformative genetic-based therapies.
- 27. iEcure, a private company, primarily develops in vivo gene therapeutics. According to its website, iEcure was "founded to advance the life's work of James M. Wilson, M.D., Ph.D[.]"
- 28. Scout Bio, a private company, adapts gene therapy technologies to veterinary medicine, treating rare diseases in dogs and cats. According to its website, "Dr. Wilson is a Penn faculty member, scientific collaborator, key advisor, and co-founder of Scout Bio. As such, he holds an equity stake in the Company, his laboratory at Penn receives sponsored research funding from Scout Bio, and as an inventor of the licensed technology he may receive additional future financial benefits under licenses granted by Penn to Scout Bio. The University of Pennsylvania also holds equity and licensing interests in Scout Bio."
- 29. RegenxBio (NASDAQ: RGNX) is a publicly traded company that uses gene therapy in the clinical stage to treat diseases. Dr. Wilson co-founded RegenxBio in 2008.

- 30. Upon information and belief, each of the above companies, co-founded by Dr. Wilson, has entered into licensing agreements with UPenn. For this reason, UPenn senior administrators and staff regularly refer to Dr. Wilson as CTT's "biggest client."
- 31. Dr. Wilson also facilitates licensing agreements for GTP's technology with other private companies that he does not own.

JURISDICTION AND VENUE

- 32. This Court has subject matter jurisdiction pursuant to 28 U.S.C § 1332(a)(1) because there is complete diversity between Dr. Faust and Defendants, and the amount in controversy exceeds \$75,000, exclusive of interest and costs.
- 33. Venue is proper in the United States District Court for the Eastern District of Pennsylvania under 28 U.S.C. § 1391(b)(2), in that a substantial part of the events or omissions giving rise to the claim occurred in the Commonwealth of Pennsylvania, specifically at the University of Pennsylvania.

I. BACKGROUND INFORMATION ON UPENN'S GTP AND PATENT POLICY

- 34. The GTP was founded at UPenn in 1993 by Dr. Wilson, who has since been the director of the program that currently employs approximately 300 people.
- 35. Created to develop and commercialize transformative genetic-based therapeutics, GTP attempts to treat inherited genetic diseases by introducing genetic material to correct a faulty gene. GTP and Dr. Wilson have been at the forefront of biotechnology developments and have generated significant revenue for UPenn through licensing agreements for technology developed within the GTP.
- 36. UPenn, like all other major research universities, requires all GTP faculty and staff to agree to its Patent Policy, as a condition of employment.

- 37. UPenn's Patent Policy requires that its employees forfeit their ownership rights to the University for any inventions they create while employed by UPenn.
- 38. UPenn derives substantial revenue from licensing agreements with private companies for inventions developed by its employees and forcibly assigned to it pursuant to its mandatory Patent Policy.
- 39. In addition to requiring that its employees relinquish ownership rights in their inventions, the Patent Policy establishes UPenn's obligations to employees who develop an invention assigned to UPenn under the Patent Policy.
- 40. The Patent Policy requires UPenn to, among other things: (1) notify inventors immediately after it begins negotiations over licensing the inventor's invention; (2) pay the inventor 30% of any cash or non-cash compensation received as a result of licensing the invention; and (3) assign ownership rights to the invention back to the inventor if UPenn determines to abandon the patent application.
 - 41. The operative version of UPenn's Patent Policy states the following:

It is the policy of the University that all INVENTIONS, together with associated MATERIALS, which are conceived or reduced to practice by INVENTORS in the course of employment at the University, or result from work directly related to professional or employment responsibilities at the University, or from work carried out on University time, or at University expense, or with SUBSTANTIAL USE OF UNIVERSITY RESOURCES under grants or otherwise, are the property of the University, effective immediately as of the time such INVENTIONS are conceived or reduced to practice. INVENTORS hereby irrevocably assign to the University all right, title and interest in and to the INVENTIONS, MATERIALS and related patent applications and patents, and shall cooperate fully with the University in the preparation and prosecution of patent applications and patents.

UPenn's Patent Policy, effective July 1, 2010, is attached to this Complaint as **Exhibit A**.

42. UPenn's Patent Policy also sets forth the conditions under which it will relinquish its rights under an invention back to the inventor:

2.1.5 Return of Inventions

- 2.1.5.2 Inventions Made with Outside Sponsorship. If an INVENTION is made with sponsorship of the federal government or other sponsor, and the University does not wish to pursue a patent application in the United States or other jurisdiction, or elects to abandon a pending patent application, or does not wish to own an issued patent on a given INVENTION, and the United States Government or other sponsor waives ownership rights, if any, the IPA may, after consultation with and subject to the approval of the Vice Provost for Research, return all of the University's right, title and interest to the INVENTION, patent application or issued patent to the INVENTORS[.]
- **2.2.1 LICENSING** The University may convey rights to its INVENTIONS through license agreements under the terms of which the University retains all right, title and interest in and to its INVENTIONS, while granting to a commercial entity the right to make, use, and/or sell products based on the INVENTION(S)
 - **2.2.1.2** CTT will notify INVENTORS of prospective licensees in an early stage of the negotiation process. The final decision on whether to license an INVENTION, to whom to license an INVENTION, the terms in the agreements, and otherwise how to proceed with the license rests with CTT, and is not appealable to the APPEALS BOARD or otherwise.

2.3 Distributions.

- **2.3.1 Distribution of Adjusted CTT Revenues.** ADJUSTED CTT REVENUES for the INVENTION (defined in Section 5.0.1, but generally described as the PRO RATA SHARE of GROSS CTT REVENUES [defined in Section 5.0.13] minus AGGREGATE UNREIMBURSED IP EXPENSES [defined in Section 5.0.20]), shall be distributed as follows:
 - **2.3.1.1** The INVENTORS PERSONAL SHARE shall be thirty percent (30%) of the ADJUSTED CTT REVENUES for the INVENTION
- **2.3.3** Allocation of the EQUITY POOL. Under licensing transactions for EQUITY are set forth in Appendix B). Under license agreements for which the University has negotiated an EQUITY POOL, where, in accordance with Appendix B.4, EQUITY will be issued directly to the INVENTOR(S), the INVENTORS shall receive thirty percent (30%) of the EQUITY POOL, unless one or more INVENTOR receives EQUITY from the licensee outside of the EQUITY POOL.
 - **2.3.3.2** Non-cash Component of License. Any tangible, noncash considerations (except EQUITY) in licenses will be distributed by CTT on a

case by case basis, in consultation with the INVENTOR(S), Vice Provost for Research, and the relevant Dean(s)

- **2.3.4 Rules Governing the Inventors Personal Share.** The INVENTORS PERSONAL SHARE of ADJUSTED CTT REVENUES for the INVENTION, under Section 2.3.1.1, shall be distributed among all INVENTORS (if more than one), as the INVENTORS unanimously designate in writing to the IPA. If the INVENTORS fail to make such unanimous written designation before the license agreement is executed, the INVENTORS PERSONAL SHARE of ADJUSTED CTT REVENUES shall be distributed among all INVENTORS as CTT, in its sole discretion, shall designate.
- **2.5** Administration of Distributions and Reporting. Distributions with a report outlining how the amounts were calculated, shall be made to each recipient within forty-five (45) days after the end of the FISCAL YEAR. The University will not pay interest on amounts received and held by the University pending distribution.

Exhibit A.

- 43. As explained in more detail herein, UPenn, at the direction of Dr. Wilson, has violated its Patent Policy by, among others: (1) failing to notify Dr. Faust that it was negotiating a license agreement for her invention or that it actually licensed her invention as one of twelve inventions included in a licensing agreement with Biogen worth up to \$2 billion; (2) failing to compensate Dr. Faust with 30% of the cash and non-cash compensation UPenn received from licensing her invention; (3) failing to notify Dr. Faust that it intended to abandon her patent application; and (4) failing to return ownership rights for the invention to Dr. Faust after deciding to abandon her patent application.
- 44. As discussed in more detail herein, UPenn's violations of its Patent Policy were willful and designed to enrich Defendants while preventing Dr. Faust from capitalizing on her life's work in order to protect the revenue streams derived from Dr. Wilson's competing patent.

II. BACKGROUND ON DR. WILSON'S ROLE WITH THE GTP

45. As stated above, Dr. Wilson founded GTP in 1993 and has served as its director since that time. Dr. Wilson is a leading figure within the University's research department,

credited with securing hundreds of millions of dollars for the University through licensing patents and technology developed in UPenn's GTP.

- 46. As a result, Dr. Wilson wields total control of all GTP decisions, including decisions regarding staffing, research, licensing, and patents.
- 47. Technology developed by GTP research staff is regularly licensed by UPenn to private companies. These licensing agreements have generated billions of dollars for UPenn.
- 48. These licensing agreements have also greatly enriched Dr. Wilson personally. As director of GTP, he is regularly listed as an "inventor" on patent applications, even when he has performed little-to-no work on the research underlying the application. As a result, upon information and belief, Dr. Wilson is listed as an inventor on approximately more than one hundred patents and patent applications developed in the GTP. Even though Dr. Wilson had little-to-no involvement in developing certain technologies and related patents that list him as an inventor, he is entitled to and receives compensation under UPenn's Patent Policy for each license agreement for a patent that lists him as an inventor.
- 49. In addition to serving as the director of the GTP, Dr. Wilson is the founder and/or executive of various therapeutic development companies. Specifically, Dr. Wilson is the founder of Passage Bio, G2 Bio Companies, iECURE, RegenxBio, and Scout Bio.
- 50. Several, if not all, of Dr. Wilson's companies entered into research and licensing agreements with UPenn, further enriching both Defendants. More specifically, Dr. Wilson's companies entered into agreements with UPenn where they pay millions of dollars to use GTP's technology for commercial efforts. Dr. Wilson also receives payment in the form of equity ownership of companies that use GTP technology. In some instances, Dr. Wilson receives sponsored research funding for his UPenn laboratory as consideration for licensing GTP's

technology.

- 51. The funds paid by Dr. Wilson's companies are then split among UPenn and Dr. Wilson, as UPenn receives the amounts owed under the licensing agreements, and Dr. Wilson receives his revenue share under the Patent Policy for patents licensed to his companies, listing him as the inventor. In this way, Dr. Wilson uses his positions at UPenn and his own companies to enrich himself largely through the work of others who created inventions while employed with GTP.
- 52. Upon information and belief, for agreements between Dr. Wilson's companies and UPenn, Dr. Wilson dictates the terms of these agreements for both UPenn and his company.
- 53. The agreements between UPenn and Dr. Wilson's companies provide substantial revenue for UPenn. As a result, Dr. Wilson is viewed as untouchable at UPenn, regardless of any misconduct he engages in, as UPenn leadership views him as the "golden goose." Dr. Wilson is frequently considered the most powerful person at UPenn, and he has it his way at UPenn.
- 54. For example, as director of GTP, Dr. Wilson has been accused of mistreating employees in various ways and using his position to enrich himself through agreements between UPenn and his companies. An ex-UPenn employee described Dr. Wilson in an article from The Daily Pennsylvanian as "the most powerful person on campus. He is untouchable. That's the way to think about it. They are untouchable[.] They have hurt and damaged so many people. People that didn't deserve it. None of them deserve what happened to them." *Available at https://www.thedp.com/article/2022/04/upenn-gene-therapy-program-jim-wilson-corrupt-investi gation-toxic-workplace* (last visited Jan. 26, 2024).
- 55. The Daily Pennsylvanian article containing the quote above also documented UPenn's abnormal treatment of Dr. Wilson, bending to his every whim and avoiding publishing

any information that could potentially make him look bad. For example, following the Daily Pennsylvanian's article detailing Dr. Wilson's mistreatment of GTP employees, UPenn tasked some of its Human Resources administrators to investigate the allegations of employee mistreatment by Dr. Wilson and others within the GTP. The investigation produced a twenty-one page report that included numerous references to Dr. Wilson. The original report was presented to UPenn's Office of General Counsel, which trimmed the report to four pages and removed any reference to Dr. Wilson.

III. DR. FAUST IS HIRED BY UPENN AS A POST-DOCTORAL RESEARCHER IN THE GTP UNDER THE SUPERVISION OF DR. WILSON

- 56. In 2010, Dr. Faust, following the receipt of her Ph.D. in Cellular and Molecular Biology and concurrent Master's degree in Human Genetics from the University of Michigan, accepted a postdoctoral research position at the GTP studying the immune response to viral vectors used in gene therapy.
- 57. During her time as a postdoctoral researcher at UPenn, Dr. Faust worked under the supervision of Defendant Dr. Wilson. Dr. Faust interviewed for the position with Dr. Wilson, who offered her the job before she left the laboratory following her scientific presentation.
- 58. In 2012, working with a collaborator, Dr. Joseph Rabinowitz of Thomas Jefferson University ("TJU"), Dr. Faust designed AAV vectors with the ability to escape the immune response that had challenged the field of gene therapy for decades, resulting in safe, long-lasting gene expression.
- 59. The invention was made with federal government support under grant numbers HL091096 (Dr. Faust), HL007954 (Dr. Faust), and AI007324 (Dr. Rabinowitz), awarded by the National Institutes of Health ("NIH").

- 60. On May 11, 2012, Provisional U.S. Patent Application 61/648,239 was filed on the CpG-depleted AAV vector technology with Drs. Faust, Rabinowitz, and Wilson listed as the inventors ("Patent Application").
- 61. A second provisional, U.S. Patent Application 61/785,368 was filed on March 14, 2013 to include additional data.
- 62. The Patent Application was interinstitutional because Dr. Rabinowitz was an assistant professor at TJU.
- 63. Due to UPenn's Patent Policy, although Dr. Faust was listed as the inventor, her ownership rights in the Patent Application were assigned to UPenn.
- 64. TJU has a similar patent policy pursuant to which Dr. Rabinowitz's ownership rights in the Patent Application were assigned to TJU. Accordingly, UPenn owned the Patent Application rights jointly with TJU.
- 65. Although Dr. Wilson was listed as an inventor of the Patent Application, the underlying technology developed by Dr. Faust would compete with Dr. Wilson's NAV capsid platform technology, the technology that Dr. Wilson's company, RegenxBio, was founded on.
- 66. In June 2012, approximately one month after sharing the research underlying the Patent Application with others in the GTP, Dr. Wilson told Dr. Faust that her employment contract would not be renewed and that he was limiting the number of experiments she could participate in for the remaining six months of her contract.
- 67. This was a complete shock to Dr. Faust, as less than a month earlier, she had developed technology that had the potential to overcome longstanding challenges within gene therapy treatment. Further, at this time, Dr. Faust was the only postdoctoral researcher in Dr. Wilson's laboratory who obtained her own NIH funding to conduct research through two

postdoctoral grants and was awarded the Sanjeev Kumar Excellence in Science award, a prestigious award bestowed to one UPenn Postdoctoral researcher a year, in addition to publishing five papers in less than three years at UPenn.

- 68. By all objective measures, Dr. Faust had excelled as a postdoctoral researcher at GTP, creating confusion as to the basis for Dr. Wilson's decision to terminate her contract.
- 69. Dr. Faust asked Dr. Wilson why he decided not to renew her contract, but he refused to provide an explanation for his decision.
- 70. Dr. Wilson's decision not to renew Dr. Faust's contract had severe professional consequences for Dr. Faust. Specifically, Dr. Faust had difficulty in obtaining a new postdoctoral research position due to questions regarding her departure from GTP, and she was also denied an NIH K99 Pathway to Independence Grant that would have allowed her to transition to an independent faculty position at a university of her choosing. For similar reasons, Dr. Wilson's unexplained decision to let her contract expire jeopardized her ability to pursue a career in academics as a professor.
- 71. In January 2013, Dr. Faust's contract with GTP expired, and her employment with UPenn terminated.
- 72. In May 2013, Dr. Faust was hired as an intern within UPenn's CTT. Between May 2013 and December 2013, Dr. Faust took on more responsibilities within the intern program (CTT Fellows Program) due to her experience dealing with technology transfer issues. Dr. Faust was quickly promoted to a CTT Fellows management position where she supervised a team of over twenty interns reviewing interpretations of technologies, prior art search, and novelty of technologies at the University of Pennsylvania. She also worked directly with CTT Technology Licensing Directors to translate intellectual property into commercial products, interfacing with

faculty at the University of Pennsylvania, and identifying, contacting, and conducting meetings with potential licensing/co-development partners.

- 73. In December 2013, Dr. Faust was offered a job, via formal offer letter, as a Technology and Commercialization Associate within CTT. The CTT Fellows Program Director, Dr. Tomas Isakowitz, recommended her for the position.
- 74. Dr. Faust accepted the position but shortly thereafter was told that Dr. Wilson must approve her employment because Dr. Wilson was CTT's "biggest client," in reference to the revenue CTT derives from agreements between UPenn and Dr. Wilson's companies.
- 75. Dr. Faust was further told that if Dr. Wilson did not approve her employment, the offer would be rescinded.
- 76. Even though UPenn had already made Dr. Faust an official offer of employment that she accepted, in January 2014, UPenn rescinded Dr. Faust's offer of employment without explanation. Upon information and belief, Dr. Wilson objected to Dr. Faust being hired in that role, which caused her employment offer to be rescinded.
- 77. After rescinding Dr. Faust's offer of employment, CTT instead hired a male researcher with lesser qualifications for the position than Dr. Faust. UPenn then assigned Dr. Faust, who previously accepted the position, to be the newly hired male employee's assistant, gave her the title of "intern," and compensated her at a rate of \$10 an hour.
- 78. Because the individual hired had lesser qualifications, Dr. Faust performed his job duties. Instead of being recognized for her work, however, UPenn labeled her as an "intern" while crediting the less qualified male employee for her work.
- 79. Upon information and belief, Dr. Wilson directed UPenn to rescind Dr. Faust's offer for a Technology and Commercialization Associate and instead offer her a \$10 an hour intern

position.

- 80. Following the end of her "internship," Dr. Faust again left UPenn's employment in May 2014.
- 81. Dr. Faust's sudden demise at UPenn was nothing short of remarkable. One moment, Dr. Wilson himself was telling Dr. Faust that she is the "smartest post-doctoral" researcher he has worked with. The next moment, she was just an intern making \$10 an hour.
- 82. The irony of Dr. Faust's demise was her brilliance, which Dr. Wilson saw as a threat to himself, evidenced by her inventing the technology that would compete with his technology.

IV. UPENN TAKES THE LEAD ON PROSECUTING THE PATENT APPLICATION AND THEN ABANDONS IT

- Application, Dr. Wilson contacted Mark Tykocinski, Dean of TJU, which had co-ownership rights of the Patent Application, to insist that UPenn take the lead on prosecuting the Patent Application.

 TJU agreed to Dr. Wilson's request.
- 84. Despite requesting that TJU allow UPenn the right to prosecute the Patent Application, UPenn failed to take any action to prosecute the Patent Application after receiving TJU's consent to take the lead. As a result of UPenn's failure to take any steps to prosecute the Patent Application timely, its international rights were lost.
- 85. More specifically, on April 11, 2013, UPenn's patent attorney, via email, reminded individuals within UPenn's CTT that a non-provisional application needed to be filed before May 2013 in order to prevent the loss of the Patent Application's international rights. UPenn, however, declined to file the second non-provisional application, therefore forfeiting the Patent Application's international rights.

- 86. The loss of the international rights was significant as someone could practice Dr. Faust's technology outside of the U.S., and there is nothing Dr. Faust could do to stop such a person from using the technology.
- 87. UPenn never informed Dr. Faust that it intended to forfeit the international rights to Dr. Faust's Patent Application. Dr. Faust only learned that the international rights to her Patent Application had been forfeited by UPenn after those rights had already been forfeited with no recourse to reinstate them.
- 88. And, although UPenn did not inform Dr. Faust that it intended to forfeit the international rights to her Patent Application, Dr. Rabinowitz was told at the time that UPenn intended to forfeit Dr. Faust's Patent Application's international rights.
- 89. Following the forfeiture of Dr. Faust's Patent Application's international rights, in August 2015, UPenn elected to abandon the Patent Application all together, which would have made Dr. Faust's invention valueless.
- 90. Specifically, in or around August 2015, UPenn's CTT informed TJU that it intended to abandon Dr. Faust's pending Patent Application, No. 14.211,666. In response, TJU reminded UPenn of its obligation to contact each of the Patent Application's inventors to ask if they would like to take over the prosecution of the Patent Application before abandonment, as required by the Patent Policy.
- 91. TJU further requested that UPenn provide it with confirmation that it informed Dr. Faust of its decision to abandon the Patent Application. And, although UPenn never sent this confirmation indeed it could not as it never informed Dr. Faust of its intent TJU's request demonstrates that UPenn intentionally failed to notify Dr. Faust of its intent to abandon the Patent Application.

- 92. Section 2.1.5.2 of UPenn's Patent Policy provides that UPenn may return ownership of patent rights to the inventor(s) if UPenn "does not wish to pursue a patent application in the United States or other jurisdiction, or elects to abandon a pending patent application[.]"
- 93. Despite TJU reminding UPenn of its obligation under its Patent Policy, UPenn failed to inform Dr. Faust that her Patent Application was being abandoned, let alone offer to return Dr. Faust's rights to her Patent Application even though UPenn intended to abandon such rights.
- 94. Dr. Faust eventually learned of UPenn's decision to abandon her Patent Application. Dr. Faust further learned that UPenn's decision to abandon her Patent Application was done at Dr. Wilson's direction.
- 95. UPenn's failure to inform Dr. Faust that it intended to abandon her Patent Application was not simply an oversight, but instead, upon information and belief, a calculated decision to ensure Dr. Faust could not obtain the rights to the Patent Application.
- 96. Within nearly all research institutions, it is standard practice for the institution to notify inventors of its intent to abandon a patent application and offer to return the ownership rights to the inventor.
- 97. Unlike UPenn, TJU notified Dr. Rabinowitz, the third-co-inventor of the technology embodied in the Patent Application, that UPenn intended to abandon the Patent Application and offered to transfer its rights to the Patent Application to him to pursue prosecution.
- 98. Dr. Faust proposed to Dr. Rabinowitz that if he took over the rights to the invention, she would form a company, obtain the investment capital needed to prosecute the Patent Application and market and license the technology, and provide financial compensation in

exchange for exclusive rights to the IP. Dr. Rabinowitz agreed to Dr. Faust commercializing the Patent Application.

- 99. TJU thereafter transferred its rights in the Patent Application to Dr. Rabinowitz.
- 100. Despite attempting to abandon the Patent Application, UPenn, after learning of Drs. Rabinowitz's and Faust's intent to prosecute and commercialize the technology, actively took steps to prevent Dr. Faust from commercializing her invention. Upon information and belief, UPenn was directed by Dr. Wilson to prevent Dr. Faust from prosecuting and commercializing her patent to prevent competition with his patented technology.
- 101. For example, Drs. Rabinowitz and Faust could not prosecute the Patent Application until UPenn corrected the Patent Application's grant information used to fund the underlying research. Without this correction by UPenn, TJU was unable to release the Patent Application's rights to Dr. Rabinowitz. Absent UPenn's correcting this information, the Patent Application would be deemed abandoned on April 15, 2016.
- 102. In an attempt to avoid losing all rights under the Patent Application, Dr. Rabinowitz's patent attorney sent numerous requests to Dr. Jennifer Langenberger, Director of UPenn's CTT/PCI, to provide the correct NIH grant information in iEdison so that the Patent Application rights could be released to Dr. Rabinowitz, which was required to prosecute the Patent Application.
 - 103. UPenn ignored Dr. Rabinowitz's patent attorney's requests.
- 104. On April 12, 2016, three days before the Patent Application would be deemed abandoned, Dr. Langenberger, Dr. Wilson, and Dr. Rabinowitz's patent attorney conducted a teleconference during which Dr. Wilson insisted that the Patent Application go abandoned, even though Drs. Rabinowitz and Faust intended to prosecute and commercialize it. During the

teleconference, Dr. Wilson was asked why he was insisting that the Patent Application be abandoned, but he refused to provide any explanation.

- 105. Also, during this teleconference, Dr. Langenberger stated that CTT would like to continue prosecuting the Patent Application but could not because Dr. Wilson wanted the Patent Application abandoned and he had the final say concerning those decisions.
- 106. In light of UPenn's unequivocal position against prosecuting the Patent Application, following the teleconference on April 12, 2016, Dr. Faust contacted Dr. Langenberger to request that UPenn return her inventor rights for the Patent Application, as TJU had done for Dr. Rabinowitz, in accordance with the UPenn Patent Policy.
- 107. Dr. Langenberger refused Dr. Faust's request despite UPenn intending to abandon the Patent Application's rights altogether, responding to Dr. Faust that "UPENN will maintain it's ownership interest in the application or in any patent that issues from it. Therefore, we are unable to return it to you."
- 108. Upon information and belief, Dr. Wilson directed UPenn to refuse to return to Dr. Faust her rights to the Patent Application, even though UPenn intended to abandon it, in order to prevent Dr. Faust from prosecuting the Patent Application and ultimately competing with Dr. Wilson's patent. That is, UPenn wanted to bury Dr. Faust's invention even though it knew the technology was valuable to satisfy Dr. Wilson's ego.
- 109. Due to UPenn's refusal to provide the correct grant information for the Patent Application thereby preventing TJU from transferring its ownership in the Patent Application to Dr. Rabinowitz, on April 15, 2016, the day before the patent rights were set to be abandoned, Dr. Rabinowitz's patent attorney was forced to file a continuation, requiring Dr. Faust to pay significant fees and resulting in a loss of over two years of the Patent's term.

V. UPENN LICENSES THE PATENT APPLICATION BUT FAILS TO PROVIDE DR. FAUST WITH NOTICE OR COMPENSATION AS REQUIRED BY THE PATENT POLICY

- 110. On November 17, 2016, Dr. Langenberger (UPENN CTT/PCI) informed Dr. Rabinowitz's patent attorney that UPenn's rights to the Patent Application were licensed to a "large entity," but refused to provide any further details on the licensing agreement, including the identity of the licensing company.
- 111. While UPenn informed Dr. Rabinowitz, who never even worked for UPenn, of the licensing agreement for the Patent Application, it never informed Dr. Faust that her Patent Application had been licensed. This demonstrates UPenn's blatant disregard for its Patent Policy, which requires UPenn to notify inventors at the early stages of negotiations to license their inventions.
- 112. Dr. Rabinowitz, however, informed Dr. Faust that UPenn had licensed the Patent Application to a large entity.
- 113. Shortly thereafter, on December 2, 2016, Dr. Faust's attorney contacted UPenn's CTT to request a full explanation of the status of the licensing agreement for the Patent Application, noting that UPenn's failure to provide notice violates UPenn's Patent Policy, specifically, Article 2.2.1.2 which states "CTT will notify inventors of prospective licensees in an early stage of the negotiation process" and Article 2.3.1.1, wherein before the license agreement execution, "the inventors personal share of adjusted CTT revenues for the invention, shall be distributed based on unanimous written designation."
- 114. UPenn did not respond to Dr. Faust's attorney's request for information and, thereafter, Dr. Faust's attorney sent three additional letters to UPenn requesting the same information.

- 115. UPenn, through Dr. Kathryn Donahue, finally responded to Dr. Faust's attorney months later, on May 2, 2017, stating that the Patent Application was licensed to Biogen (NASDAQ: BIIB) but refused to provide any additional information regarding the terms of the licensing agreement.
- 116. This disclosure by UPenn, nearly a year after it licensed Dr. Faust's Patent Application to Biogen, is the first time UPenn provided Dr. Faust with any information regarding its licensing agreements for her Patent Application.
- 117. Dr. Donahue further stated that, pursuant to UPenn's Patent Policy, "the current designation among the two inventors, Wilson and Faust, is a generous 50/50 split" although Dr. Faust was never even given an opportunity to discuss this revenue split with Dr. Wilson.
- 118. However, the "generous 50/50 split" was illusionary because, as Dr. Faust would later find out, even though UPenn licensed her Patent Application, it used crafty accounting to avoid paying her any compensation thereunder, instead diverting a majority of such revenue directly to Dr. Wilson.
- 119. Dr. Faust later learned that the licensing agreement between UPenn and Biogen for the Patent Application was included as part of a larger licensing agreement described in a May 2016 press release as a "\$2 billion multi-year alliance [with UPenn and Dr. Wilson] to focus on development of new gene therapy and gene editing technologies and create a therapeutic platform for a broad range of diseases[.]" Biogen Press Release, May 16, 2016, available at https://investors.biogen.com/news-releases/news-release-details/biogen-announces-collaboration -university-pennsylvania-multiple (last visited January 26, 2024).
- 120. Under the licensing agreement, UPenn licensed twelve patents/patent applications to Biogen, in exchange for Biogen making an upfront payment to UPenn of \$20 million with an

additional \$62.5 million committed to fund R&D over the next 3-5 years, thereby guaranteeing that UPenn would receive at least \$82.5 million under the Biogen agreement. The agreement also had the potential to trigger milestones that range from \$77.5M to \$137.5M per product royalties payable on net sales products.

VI. UPenn Compensates Every Inventor Under the Biogen Licensing Agreement Except Dr. Faust

- 121. Dr. Faust was the only inventor of technology licensed to Biogen who was not compensated pursuant to the Patent Policy.
- 122. More specifically, the licensing agreement between UPenn and Biogen, entered May 2016, included the license for twelve patents/patent applications owned by UPenn, including Dr. Faust's Patent Application.
- 123. Upon information and belief, Biogen specifically requested that Dr. Faust's Patent Application be included in the licensing agreement with UPenn.
- 124. Upon information and belief, Dr. Wilson is listed as the inventor or co-inventor on eleven of the twelve patents/patent applications included in the Biogen licensing agreement.
- 125. Each of the inventors/co-inventors for each of the twelve patents/patent applications included in the Biogen licensing agreement received compensation from UPenn, except Dr. Faust, the *only* inventor who received no notice of the licensing agreement or compensation thereunder.
- 126. UPenn, at the direction of Dr. Wilson, attempted to justify not compensating Dr. Faust for licensing her Patent Application through crafty accounting, whereby UPenn assigned a value of \$0 to Dr. Faust's Patent Application and attributing the funds paid by Biogen under the agreement to the other eleven patents and patent applications.
 - 127. More specifically, UPenn assigned different shares of revenue to each of the twelve

patent and patent application included in the Biogen agreement. As a result, different inventors were paid different amounts depending on the share of revenue attributed to their patent by UPenn.

- 128. For example, if UPenn received \$1 million from Biogen, 30%, or \$300,000 of that amount would be distributed among the inventors of the twelve licensed patents/patent applications. Therefore, if UPenn assigned revenue percentage of 10% to Patent Application 1, the inventors of Patent Application 1 would receive \$30,000 to split among them.
- 129. To avoid paying Dr. Faust anything under the Biogen licensing agreement, UPenn allocated 0% of the revenue paid under the agreement to Dr. Faust's Patent Application.
- 130. More specifically, according to UPenn's attorney, Dr. Faust's Patent Application was allocated 0% because it was added to the licensing agreement after the parties had already negotiated royalties and other payments which were not changed when Dr. Faust's Patent Application was added to the agreement.
- 131. By failing to compensate Dr. Faust pursuant to its Patent Policy, funds paid by Biogen that should have been provided to Dr. Faust were instead unfairly distributed to Dr. Wilson and UPenn.
- 132. UPenn's assertion that Dr. Faust's Patent Application has no value is disingenuous and was done to avoid paying her what is fair and owed under UPenn's Patent Policy, as there would be no reason to include Dr. Faust's Patent Application in the agreement if it provided no value.
- 133. Upon information and belief, UPenn's decision not to attribute any revenue to Dr. Faust's Patent Application was done at the direction of Dr. Wilson, who controls all decisions regarding the GTP and its patents.
 - 134. Dr. Wilson's control over the allocation of revenue designated for inventors

allowed him to unjustly profit to the detriment of Dr. Faust. Specifically, as Dr. Wilson was listed as an inventor in eleven of the twelve patents/patent applications included in the Biogen agreement, Dr. Wilson, upon information and belief, shifted the revenue that should have been attributed to Dr. Faust's Patent Application to a different patent/patent application also listing him as an inventor, therefore again using his control over UPenn to further enrich himself.

VII. NXGEN PROSECUTES THE PATENT APPLICATION

- 135. On June 28, 2017, Dr. Faust formed NxGEN to lead the prosecution and commercialization efforts for the Patent Application.
- 136. NxGEN's ownership rights in the Patent Application flowed through Dr. Rabinowitz who received a waiver by both TJU and the United States Government for full rights in the Patent Application.
- 137. Dr. Rabinowitz irrevocably transferred his ownership rights in the Patent Application to NxGEN for equity in the company.
- 138. After receiving Dr. Rabinowitz's rights, NxGEN reimbursed TJU for costs incurred in prosecuting the Patent Application and continued the prosecution efforts, with NxGEN paying 100% of the patent prosecution costs. The patent prosecution costs also included "large entity fees," which were required as a result of UPenn's licensing agreement with Biogen, a large entity, which approximately doubled the USPTO fees NxGEN incurred to prosecute the patent.
 - 139. NxGEN spent approximately \$100,000 to prosecute the Patent Application.
- 140. Ultimately, the '210 Patent was issued by the United States Patent and Trademark Office in 2021.
- 141. As CEO of NxGEN, Dr. Faust secured a large investment to market, develop, and license the technology, established a brand, including a logo and website

(www.nxgenvectorsolutions.com) that features the technology. Dr. Faust also developed an electronic and printed brochure advertising the technology for educational and for commercialization purposes, which has been widely distributed at industry meetings and other events. She hosted exhibit booths for NxGEN at the American Society of Gene and Cellular Therapy ("ASGCT") meeting in 2019 and 2022 featuring the technology where over 1,000 attendees stopped by the booth to learn more about the technology and thereby amassing a large database of potential licensees and partners. She hosted a cocktail reception at the ASGCT meeting to provide information and to market the technology that was attended by 65+ industry leaders. She designed and funded sponsored content as well as an Ad featuring the technology in Genetic Engineering and Biotechnology News (GEN) magazine. She presented on the CpG-depletion technology as an invited guest speaker at ten international gene therapy conferences since 2019. She attended an exclusive invite only program at the Washington Post headquarters for a program on female entrepreneurs representing NxGEN. She engaged in meaningful conversations with prospective licensees. She provided consulting services to advise the prospective licensee on the best way to design vectors as well as how to test those vectors in vitro and in vivo. She further developed the technology by generating NxGEN's own proprietary vectors with specific transgenes and vectors. She also developed a cardiac gene therapy using the technology that holds great promise in preventing the development of chronic cardiac allograft rejection following cardiac transplantation and provides a new treatment strategy to overcome a critical challenge to long-term transplant success.

142. Despite NxGEN's best efforts – including expending substantial sums marketing the technology – no prospective licensees would agree to license the technology because UPenn still held half ownership in the Patent.

- 143. Due to this, Dr. Faust repeatedly contacted Dr. Kathryn Donahue, UPenn PCI legal counsel, to request that UPenn and NxGEN enter an agreement so NxGEN could license and enforce the Patent.
- 144. Dr. Faust even generously offered to split proceeds from any licensing agreements for the Patent, even though UPenn abandoned the Patent Application in 2015 and NxGEN incurred the full cost of prosecuting the Patent and marketing the technology.
- 145. UPenn failed to respond to five separate emails over a three-month period from Dr. Faust to discuss an agreement that would allow NxGEN, after expending substantial sums to prosecute the Patent, to commercialize the Patent by assigning NxGEN its exclusive rights.
- 146. After failing to respond in any way to Dr. Faust's first five emails, Dr. Donahue finally responded, stating that the Patent "is not currently licensed by UPENN to a third party and UPENN is not in negotiations with any third-party concerning licensing the patent." Dr. Donahue instructed Dr. Faust to contact Dr. Tom Logan, GPT's Chief Strategy & Business Officer, to discuss licensing.
- 147. As instructed, Dr. Faust contacted Dr. Logan to request a meeting to discuss an assignment agreement for UPenn's ownership rights in the Patent.
- 148. Dr. Faust and Dr. Logan connected via teleconference on August 18, 2021, during which Dr. Logan agreed that it made sense for UPenn to give NxGEN exclusive rights to the Patent, as UPenn had abandoned it and such an arrangement would still allow UPenn to receive a financial benefit from the Patent through NxGEN's agreement to provide UPenn 50% of the revenue received through its commercialization.
- 149. Dr. Logan made clear, however, that although there appeared to be no reason why UPenn would not enter into such an exclusive assignment agreement for the Patent with NxGEN,

he would need to "scrub PCI's records" to confirm that there were no licenses with third parties and that the final decision was up to Dr. Wilson. Dr. Logan stated that he would follow up with Dr. Faust after speaking with Dr. Wilson about NxGEN's desire to commercialize the Patent and reiterated in an email that Dr. Wilson would make the decision regarding licensing the technology. Dr. Logan informed Dr. Faust that Dr. Wilson also wanted her to present a PowerPoint on the technology, an overview of how NxGEN planned to use the technology, and a discussion on how the technology would fit into Dr. Wilson's vectors. On September 22, 2021, Dr. Faust presented a PowerPoint presentation.

- 150. While the conversation between Dr. Faust and Dr. Logan was positive, for several weeks thereafter, Dr. Logan repeatedly canceled scheduled teleconference meetings with Dr. Faust. When Dr. Logan finally did follow up with Dr. Faust, in October 2021, he offered NxGEN a worthless non-exclusive license.
- 151. When Dr. Faust asked Dr. Logan why UPenn would only agree to a non-exclusive license agreement which was worthless to NxGEN Dr. Logan stated that UPenn does not grant exclusive licenses on GTP platform technologies.
- 152. This is not true, however, as UPenn grants exclusive licenses on GTP platform technologies to Dr. Wilson's company, RegenxBio.
- 153. UPenn's refusal to grant NxGEN an exclusive license for the '210 Patent functionally foreclosed the ability of Dr. Faust to commercialize the Patent because no company would license the Patent from NxGEN unless the company had full rights to the Patent, rendering UPenn's offer of a non-exclusive license agreement worthless to Dr. Faust and NxGEN. Additionally, Dr. Faust was unable to obtain a Series C investment for her company because every investor she spoke with told her that she would need to show profitability of the company's first

gene therapy platform, the invention embodied in the Patent. Dr. Wilson was fully aware of this. From an email to Tom Logan on September 29th: "NxGEN's investors have been very clear that we would need an exclusive license for the CpG-depletion technology to move forward."

- 154. Upon information and belief, Dr. Wilson directed UPenn not to assign NxGEN exclusive rights to the Patent.
- 155. Following UPenn's refusal to agree to an exclusive assignment of its rights to the Patent, Dr. Faust reached out to PCI to request that they reconsider their decision. In response, on January 10, 2022, Dr. Donohue responded to Dr. Faust's plea, stating:

The decision whether and how and to whom to license UPENN IP rests with PCI. We do not intend to debate or justify our internal decision-making rationale with NxGEN. If NxGEN is not interested in licensing UPENN's interest in Patent No. 11,015,210 on a nonexclusive basis, we consider the discussion closed and request that you and NxGEN desist from contacting PCI.

- 156. On April 21, 2022, Dr. Faust was quoted in an article published in the Daily Pennsylvania, UPenn's student newspaper, where she discussed how she was terminated from GTP after inventing a technology that competed against Dr. Wilson's multi-million dollar NAV capsid technology.
- 157. On May 10, 2022, Dr. Wilson's personal attorney contacted NxGEN's attorney to inform him that Dr. Wilson had prepared a lawsuit against Dr. Faust (and everyone else interviewed in the Daily Pennsylvanian article) for speaking out against him in the Daily Pennsylvanian article. Dr. Wilson's attorney further stated, however, that Dr. Wilson would be willing to "bury the hatchet" and give Dr. Faust "what she wants" in return for her agreement to refrain from discussing Dr. Wilson's misconduct or giving any more interviews on the same.
- 158. In response, NxGEN's attorney stated that Dr. Faust wanted exclusive rights to her issued Patent so she could finally monetize her technology.

- 159. On July 7, 2022, UPenn sent Dr. Faust an assignment agreement for her Patent. However, the assignment, like the non-exclusive assignment agreement previously proposed by UPenn, was not exclusive to NxGEN, but instead included license "grant backs" to unidentified worldwide companies, labeled only as "Penn Covered Entities," which UPenn defined as "commercial entities that have an agreement to sponsor research at Penn, to collaborate with Penn and/or to license rights (directly from Penn or from a Penn licensee) for discoveries relating to adeno-associated vectors made by any Penn faculty member, either now or in the future."
- 160. In other words, under UPenn's proposed assignment agreement, Dr. Faust would have an exclusive license, except as to any entity that falls under the definition of Penn Covered Entities. Due to these "exceptions," the assignment would be "exclusive" in name only as the unidentified number of entities would have the right to use Dr. Faust's technology covered by the '210 Patent. The proposed assignment agreement also required Dr. Faust to release all claims against UPenn, the unidentified Penn Covered Entities, and covenant not to sue any of the Penn Covered Entities in the future. This provision would essentially grant the Penn Covered Entities a license to the Patent as Dr. Faust was both agreeing to allow them use of the Patent and not to sue them in the future for matters relating to the Patent.
- 161. Despite Dr. Faust's repeated requests, UPenn would not identify which companies were considered "Penn Covered Entities."
- 162. Although UPenn refused to identify the identities of the "Penn Covered Entities," on September 14, 2022, UPenn's attorney, Eric Kraeutler of Morgan Lewis, told Dr. Faust "that there currently are 37 such entities."
- 163. Neither Dr. Faust nor other UPenn PCI employees she consulted had ever heard of any company designated as a "Penn Covered Entity." Eric Kraeutler confirmed that the term had

been devised specifically for use in the language of the assignment between UPenn and Dr. Faust.

- 164. The proposed assignment's inclusion of license grant backs to the Penn Covered Entities would have made it virtually impossible for Dr. Faust to enforce and monetize the Patent and therefore she refused to agree to UPenn's proposed "assignment."
- 165. Upon information and belief, UPenn attempted to obtain Dr. Faust's release of claims against these unidentified Penn Covered Entities because it had already licensed the '210 Patent to at least some of those companies and attempted to use the assignment agreement to obtain a release to prevent Dr. Faust from pursuing any claims against those companies or UPenn in the future for failing to properly compensate her for licensing her Patent without notifying her.
- 166. In fact, unless UPenn had already licensed the Patent to the Penn Covered Entities or planned to do so in the future, the license grant-back to the Penn Covered Entities included in the proposed assignment agreement serves no purpose. UPenn's total lack of transparency regarding the identity of the Penn Covered Entities or need for grant-backs to them further suggested that UPenn has already entered into agreements, or planned to, with these entities and was simply trying to prevent future claims by Dr. Faust or NxGEN.
- 167. In response to the non-exclusive assignment again proposed by UPenn, Dr. Faust's attorney contacted UPenn's attorney to explain that, due to UPenn's decision to abandon the Patent, Dr. Faust has expended substantial sums of money to prosecute and market the Patent and, had she not done so, the Patent would have been abandoned and therefore requested the UPenn assign her full rights to the Patent.
- 168. In response, UPenn's attorney simply responded that, "Thank you for your note.

 Penn withdraws its offer to assign rights in the '210 patent."
 - 169. Around this time, in late 2022, Dr. Faust came across a Securities and Exchange

Commission filing for RegenxBio, Dr. Wilson's company, containing an exhibit to a licensing agreement between UPenn and RegenxBio for "Background Know-How" and "Patent Rights" which includes technology that "was discovered by Dr. Wilson, or other Penn researchers working under his direct supervision at Penn and … are related to the adeno."

170. This language demonstrates that the licensing agreement between UPenn and RegenxBio includes a license to the '210 Patent. Dr. Faust's invention is also featured in multiple RegenxBio corporate presentations including RegenxBio's 2021 Corporate Slide Deck, slide 22, and RegenxBio's 2024 Corporate Slide Deck, 30, available page at https://ir.regenxbio.com/static-files/a7854e2e-e23f-4621-8fd7-0e49fac45bd6 (last visited January 26, 2024), on RegenxBio's Company website's therapeutic pipeline page for the its Duchenne Muscular Dystrophy Platform technology (RGX-202), available at https://www.regenxbio.com/therapeutic-programs/rgx-202/ (last visited January 26, 2024), and in 10-K filing, at pages 8-9, available RegenxBio's December 31, 2021 SEC https://regenxbio.gcs-web.com/node/10806/html (last visited January 26, 2024).

171. RegenxBio is also the owner of International Patent Application WO 2021/108755 entitled "Microdystrophin Gene Therapy Constructs and Uses" filed on sequences which incorporate Dr. Faust's invention (*e.g.* see paragraphs [0022], [0039], [0040], [0041], [0065], [0067], [0091], [0099]-[00101], [00185], [00189], Example 1, and claim 18). Ironically, the patent application references Dr. Faust's scientific publication, 'CpG-depleted adeno-associated virus vectors evade immune detection' (*Journal of Clinical Investigation*, 2013, 123(7): p. 2994-3001), which was the first to demonstrate that skeletal muscle delivery of CpG-depleted AAV vectors (Dr. Faust's invention) attenuated adaptive immune responses, substantially reduced cellular infiltrate, and prolonged gene expression. Dr. Faust's publication teaches that CpG-depleted AAV

vectors provide a platform for improvements in safety and efficacy for muscle-directed gene delivery of structural proteins, such as sarcoglycans and dystrophin, for the treatment of muscular dystrophy. Dr. Faust won an award and was an invited guest speaker at the American Society of Gene and Cellular Therapy on the subject matter. She also submitted an NIH Pathway to Independence K00/R00 grant, which is designed for promising postdoctoral researchers to become independent faculty members at a university of their choosing, to research the effectiveness of CpG-depleted AAV vectors expressing microdystrophin as a novel strategy for diminishing AAV associated immunity and transient transgene expression for treating Muscular Dystrophy.

- to 30 are most likely to be funded), a score that greatly favored a funding award upon resubmission. However, her resubmission did not even receive a score. It was relayed to her by the K99 Program director that no one could understand why she was no longer a member of Dr. Wilson's laboratory since she was so successful in his lab and that prevented her from being considered for funding. Dr. Wilson sidelined Dr. Faust's career and then later used her invention for his company's Duchene Muscular Dystrophy gene therapy platform with an estimated \$7B global market within 5 years (2024 RegenxBio corporate presentation, page 8), while refusing even to compensate her for her inventorship money on a patent he insisted go abandoned that she prosecuted, paid for, and marketed.
- 173. This is further proof that UPenn licensed the '210 Patent to two publicly traded companies and neither notified nor compensated Dr. Faust in violation of UPenn's Patent Policy.
- 174. Dr. Faust contacted UPenn to ask why she was not informed or compensated for the licensing agreement of her Patent between UPenn and RegenxBio, and, in response, UPenn claimed that it did not receive any revenue from that licensing agreement and therefore Dr. Faust

was neither notified nor compensated for the licensure of her Patent. UPenn offered no explanation for failing to notify Dr. Faust that it licensed certain rights under the Patent to RegenxBio.

- 175. Upon information and belief, UPenn received compensation for licensing the '210 Patent to RegenxBio, whether directly or indirectly, but concealed this fact from Dr. Faust to avoid compensating her under the Patent Policy.
- 176. UPenn does not license its technology to private, for-profit companies for free. Therefore, either UPenn lied to Dr. Faust about not receiving any compensation from RegenxBio for the Patent license, or Dr. Wilson engaged in self-dealing by licensing the '210 Patent to his own company for no charge in violation of his fiduciary duty to UPenn.
- 177. UPenn's failure to compensate Dr. Faust is yet another violation of UPenn's Patent Policy, which requires that inventors, such as Dr. Faust, be compensated for both cash and non-cash components of any license.
- 178. Upon information and belief, in addition to Biogen and RegenxBio, UPenn has licensed the '210 Patent to at least thirty-five other companies, whether for cash or non-cash consideration, which comprise the "Penn Covered Entities" included by UPenn in the assignment agreement but not identified. Or, Dr. Wilson engaged in self-dealing by licensing the '210 Patent to his own company for no charge or for cash or non-cash consideration, in violation of his fiduciary duty to UPenn, not to mention obligation to Dr. Faust.
- 179. To date, UPenn has not provided Dr. Faust with *any* compensation for any licensing agreements it has entered into for her Patent.

COUNT I – BREACH OF CONTRACT

(By Dr. Faust Against UPenn)

180. Dr. Faust repeats each allegation in each of the proceeding paragraphs of this

Complaint with the same force and effect as if set forth herein.

- 181. UPenn's Patent Policy requires it to pay inventors 30% of any revenue received through licensing their inventions as well as a component of any "non-cash" consideration received by UPenn for the same.
- 182. UPenn's Patent Policy also requires the University to notify inventors "of prospective licensees in an early state of the negotiation process."
- 183. UPenn committed numerous breaches of its Patent Policy with regard to the '210 Patent.
- 184. First, UPenn licensed Dr. Faust's Patent Application to Biogen, but never provided Dr. Faust notice of this license agreement at an "early state of the negotiation process" as required by the Patent Policy.
- 185. Instead, UPenn only admitted to licensing Dr. Faust's Patent Application to Biogen after Dr. Faust learned of this independently and confronted UPenn about its licensing her technology without any notice or compensation as required by the Patent Policy.
- 186. Moreover, publicly available documents demonstrate that UPenn also licensed the '210 Patent to RegenxBio, a company founded by Dr. Wilson, for which UPenn never provided Dr. Faust notice or compensation.
- 187. UPenn, upon information and belief, also licensed the '210 Patent to the other thirty-five Penn Covered Entities, for which it tried to obtain a Patent license and release under the proposed assignment agreement between UPenn and NxGEN.
- 188. UPenn failed to provide Dr. Faust notice or compensation for any licensing agreement it entered into for her invention.
 - 189. Upon information and belief, UPenn has received hundreds of millions of dollars,

directly or indirectly, from licensing agreements that included the '210 Patent, but has failed to pay her any compensation as required by the Patent Policy.

COUNT II – BREACH OF CONTRACT – BREACH OF THE COVENANT OF GOOD FAITH AND FAIR DEALING

(By Dr. Faust Against UPenn)

- 190. Dr. Faust repeats each allegation in each of the proceeding paragraphs of this Complaint with the same force and effect as if set forth herein.
- 191. Every contract in Pennsylvania imposes on each party a duty of good faith and fair dealing in performance and its enforcement.
- 192. UPenn, by failing to assign its ownership rights in the Patent to Dr. Faust, breached the Patent Policy by failing to perform in accordance with its duty of good faith and fair dealing.
- 193. The Patent Policy provides that if UPenn elects to abandon a patent, it will return the ownership rights in the patent back to the inventor. Specifically, the Article 2.1.5.2 of Patent Policy states:

If an INVENTION is made with sponsorship of the federal government or other sponsor, and the University does not wish to pursue a patent application in the United States or other jurisdiction, or *elects to abandon a pending patent application*, or does not wish to own an issued patent on a given INVENTION, and the United States Government or other sponsor waives ownership rights, if any, the IPA may, after consultation with and subject to the approval of the Vice Provost for Research, *return all of the University's right, title and interest to the INVENTION, patent application or issued patent to the INVENTORS*[.]

Ex. A (emphasis added).

- 194. The above provision is intended to assure inventors that UPenn will return its ownership rights in their inventions if UPenn elects to abandon an inventor's patent.
- 195. UPenn violated the duty of good faith and fair dealing by electing to abandon Dr. Faust's Patent Application, failing to notify her of its intent to abandon the Patent Application, and

then refusing to return her rights in the Patent Application after she expended substantial funds to prosecute and market the Patent.

- 196. As explained above, UPenn, in 2016, elected to abandon Dr. Faust's Patent Application, thereby forgoing any rights in the technology.
- 197. UPenn willfully failed to notify Dr. Faust of its intent to abandon her Patent Application.
- 198. Although UPenn failed to notify Dr. Faust that it intended to abandon her Patent Application, Dr. Faust learned of UPenn's intent to abandon and, through NxGEN, obtained Dr. Rabinowitz's ownership interest in the Patent Application, which had been assigned to him by TJU after UPenn decided to abandon the Patent Application.
- 199. Relying on the Patent Policy and UPenn's unequivocal position that it intended to abandon the Patent Application, Dr. Faust undertook significant cost and effort to prosecute and market the patent.
- 200. After obtaining the Patent and attracting companies interested in securing a license for its use, UPenn refused to assign its rights back to Dr. Faust, even though it previously intended to completely abandon the Patent.
- 201. UPenn presently claims that it currently has no licensing agreement, which includes the '210 Patent, but refuses to assign the rights to the Patent back to her so she can commercialize her invention.
- 202. While the Patent Policy provides that UPenn "may" assign the rights to an invention back to an inventor if it elects to abandon a patent application, the spirit of the agreement is that UPenn will give inventors back their rights in inventions which UPenn elects to abandon.
 - 203. By electing to abandon the Patent Application but refusing to assign Dr. Faust the

rights to her Patent, UPenn has violated the duty of good faith and fair dealing required under the Patent Policy.

- 204. UPenn's decision to bury Dr. Faust's technology to please Dr. Wilson breached its duty of good faith and fair dealing.
- 205. Simply put, UPenn's decision to (1) bury the technology or (2) refuse granting Dr. Faust the exclusive license to the technology has no legitimate basis other than to treat Dr. Faust unfairly.

COUNT III – UNJUST ENRICHMENT

(By Dr. Faust Against UPenn)

- 206. Dr. Faust repeats each allegation in each of the proceeding paragraphs of this Complaint with the same force and effect as if set forth herein.
- 207. UPenn has been unjustly enriched through its use of Dr. Faust's invention without having to compensate her as required under the Patent Policy.
- 208. As discussed above, UPenn's Patent Policy requires that UPenn compensate inventors with 30% of revenue received from licensing agreements for technology they developed while employed by UPenn.
- 209. UPenn has licensed Dr. Faust's technology to at least one private company, Biogen, and, upon information and belief, approximately thirty-six other companies, including Dr. Wilson's company, RegenxBio.
- 210. UPenn has failed to provide Dr. Faust with notice of these licensing agreements or compensation as required by the Patent Policy.
- 211. As a result of UPenn's failure to compensate Dr. Faust in connection with licensing agreements for her invention, UPenn has been unjustly enriched through its retention of revenue

received pursuant to licensing agreements which should have been paid to Dr. Faust.

COUNT IV – UNJUST ENRICHMENT

(By Dr. Faust Against Dr. Wilson)

- 212. Dr. Faust repeats each allegation in each of the proceeding paragraphs of this Complaint with the same force and effect as if set forth herein.
- 213. Dr. Wilson has also been unjustly enriched by UPenn's failure to compensate Dr. Faust in accordance with its Patent Policy for revenue received from agreements licensing her invention to private companies.
- 214. As explained above, the licensing agreement between Biogen and UPenn included twelve patents and patent applications, eleven of which listed Dr. Wilson as an inventor, therefore entitling him to a share of the revenue paid thereunder pursuant to UPenn's Patent Policy.
- 215. Dr. Wilson also controls all decision regarding licensing agreements entered into by UPenn for technology developed in the GTP.
- 216. By failing to compensate Dr. Faust for the inclusion of her invention in the Biogen agreement, Dr. Wilson's other patents included in the Biogen agreement, upon information and belief, were allocated additional funds which should have been allocated to Dr. Faust's Patent Application.
- 217. As a result, Dr. Wilson was unjustly enriched by allocating \$0 under the Biogen agreement to Dr. Faust's Patent Application and instead allocating such funds to other patents listing him as the inventor and entitling him to a larger percentage of the allocated amount than he would have received under the 50%-50% revenue split between him and Dr. Faust for the Patent Application.

COUNT V – TORTIOUS INTERFERENCE WITH AN EXISTING CONTRACT (By Dr. Faust Against Dr. Wilson)

- 218. Dr. Faust repeats each allegation in each of the proceeding paragraphs of this Complaint with the same force and effect as if set forth herein.
- 219. Dr. Wilson tortiously interfered with the contractual relationship, established through the Patent Policy, between Dr. Faust and UPenn.
- 220. As discussed above, Dr. Wilson has virtually complete control over all decisions relating to the GTP, its technology, or licensing agreements for GTP's technology with third-parties.
- 221. As discussed above, UPenn failed to notify Dr. Faust that it was licensing her Patent Application to Biogen or compensate Dr. Faust for the licensed use of her Patent Application granted to Biogen. These actions by UPenn violate the Patent Policy.
- 222. Upon information and belief, Dr. Wilson directed UPenn not to notify Dr. Faust that it was licensing her technology to Biogen as well as to attribute 0% of the revenue received from Biogen to her Patent Application.
- 223. UPenn followed Dr. Wilson's direction and failed to notify Dr. Faust that her technology was being licensed to Biogen and attributed 0% of the revenue received to her Patent Application, instead attributing all revenue received to the other eleven patents and patent applications.
- 224. In addition to directing UPenn not to notify Dr. Faust that her invention was being licensed to Biogen, upon information and belief, Dr. Wilson also directed UPenn to conceal from Dr. Faust licensing agreements with other companies for her technology, including Dr. Wilson's company RegenxBio, and withhold compensation that should have been paid to Dr. Faust as result

of these licensing agreements.

- 225. As explained above, UPenn followed Dr. Wilson's directive and failed to notify Dr. Faust of other licensing agreements for her technology with third-parties.
- 226. Dr. Wilson also tortiously interfered with UPenn's obligations to Dr. Faust under the Patent Policy by directing it not to notify Dr. Faust that UPenn was abandoning her Patent Application and, after she learned of UPenn's intent to abandon and exhausted substantial resources to prosecute the Patent Application through NxGEN, directing UPenn not to assign its rights to the Patent, in violation of the Patent Policy.
- 227. UPenn followed Dr. Wilson's direction, did not notify Dr. Faust of its intent to abandon her Patent and, after she prosecuted it, refused to assign her its rights, even after being offered 50% of the royalties received through its commercialization.
- 228. Dr. Wilson directed UPenn to violate Dr. Faust's rights under the Patent Policy to harm her by preventing her from being able to commercialize her Patent which directly competed with one of Dr. Wilson's multi-million dollar patents.
- 229. As a result of Dr. Wilson's tortious interference with Dr. Faust's rights under the Patent Policy, Dr. Faust suffered actual damages to be determined at trial.

COUNT VI – TORTIOUS INTERFERENCE WITH BUSINESS RELATIONS (By NxGEN Against Dr. Wilson)

- 230. Plaintiffs repeat each allegation in each of the proceeding paragraphs of this Complaint with the same force and effect as if set forth herein.
- 231. Dr. Wilson also tortiously interfered with prospective business relations between NxGEN, UPenn, and third-parties interested in licensing Dr. Faust's Patent.
 - 232. As explained above, even though UPenn elected to abandon Dr. Faust's Patent

Application, Dr. Faust, after prosecuting the Patent Application and marketing the technology, offered UPenn 50% of royalties received from the use of the Patent in exchange for assigning its ownership rights to NxGEN.

- 233. At the time Dr. Faust presented this offer, UPenn claimed that it was not currently licensing the '210 Patent to any third-parties. Therefore, as Dr. Logan noted, Dr. Faust's offer was a good deal for UPenn, as it allowed the university to receive revenue from the Patent, which it purportedly was not using and had previously elected to abandon.
- 234. Dr. Logan, while expressing his support for an exclusive assignment to NxGEN, stated that Dr. Wilson was in charge of the ultimate decision to enter into such an agreement.
- 235. Despite Dr. Faust's meeting with Dr. Logan wherein he stated that it made sense for UPenn to assign its ownership rights in the Patent to NxGEN, after consulting with Dr. Wilson, UPenn rejected Dr. Faust's offer.
- 236. At the time that UPenn rejected NxGEN's offer to provide it with 50% royalties in exchange for exclusive rights to Dr. Faust's Patent, Dr. Wilson and UPenn were aware that NxGEN was seeking Series C funding, which it would only obtain if it could show revenue through the licensing of Dr. Faust's Patent.
- 237. Dr. Wilson knew that without exclusive rights to the Patent, NxGEN would be unable to secure Series C funding, and, absent such funding, NxGEN would no longer be able to continue operations.
- 238. Upon information and belief, Dr. Wilson directed UPenn to reject NxGEN's offer, even though UPenn was purportedly not making any use of her Patent, in order to prevent Dr. Faust's technology from becoming commercialized, as the Patent directly competed with one of his patents which was heavily relied upon by his company RegenxBio.

- 239. As a result of Dr. Wilson's tortious interference, UPenn rejected NxGEN's generous offer.
- 240. This accomplished Dr. Wilson's goal as he knew that without full ownership rights over the Patent, Dr. Faust would be unable to find any third-party willing to pay to license the Patent.
- 241. At the time that Dr. Wilson instructed UPenn to reject Dr. Faust's offer for assignment of its rights to her Patent, Dr. Faust was in discussions with various companies interested in licensing the Patent from NxGEN. Upon information and belief, Dr. Wilson was aware of Dr. Faust's efforts to market and commercialize the Patent.
- 242. Accordingly, Dr. Wilson's directive to UPenn to reject Dr. Faust's offer tortiously interfered with the prospective business relationship between UPenn and NxGEN to obtain full rights to the Patent.
- 243. In addition, Dr. Wilson's misconduct also tortiously interfered with NxGEN's prospective business relationship with third-parties interested in licensing the Patent if NxGEN could obtain full ownership from UPenn.
- 244. As a result of Dr. Wilson's tortious interference with NxGEN's prospective business relationship with UPenn and third-parties interested in licensing the Patent, NxGEN has suffered actual damages to be determined at trial.

COUNT VII – VIOLATION OF PENNSYLVANIA'S WAGE PAYMENT AND COLLECTION LAW

(By Dr. Faust Against UPenn)

- 245. Dr. Faust repeats each allegation in each of the proceeding paragraphs of this Complaint with the same force and effect as if set forth herein.
 - 246. UPenn violated Pennsylvania's Wage Payment and Collection law, 43 Pa. Stat. §

- 260.1 *et seq*. ("WPCL"), by failing to pay Dr. Faust the compensation required by the Patent Policy for licensing her technology to third-parties.
- 247. The WPCL allows an employee to enforce payment of wages and compensation to which the employee is entitled by the terms of an agreement.
- 248. Under the WPCL, "wages" includes "all earnings of an employe, regardless of whether determined on time, task, piece, commission or other method of calculation. The term 'wages' also includes fringe benefits or wage supplements whether payable by the employer from his funds or from amounts withheld from the employes' pay by the employer." 43 Pa. Stat. § 260.2a.
- 249. The WPCL defines "fringe benefits or wage supplements" as including "all monetary employer payments to provide benefits under any employee benefit plan, as defined in section 3(3) of the Employee Retirement Income Security Act of 1974, 29 U.S.C. § 1001 et seq.;1 as well as separation, vacation, holiday, or guaranteed pay; reimbursement for expenses; union dues withheld from the employes' pay by the employer; and any other amount to be paid pursuant to an agreement to the employe, a third party or fund for the benefit of employes." *Id.*
- 250. The WPCL provides that employers must pay their employees wages within ten days after such payment is due pursuant to a binding agreement. 43 Pa. Stat. § 260.3. The WPCL affords employees who do not receive wages in accordance with the WPCL a cause of action against the employer. 43 Pa. Stat. § 260.9a.
- 251. UPenn's Patent Policy, which Dr. Faust agreed to in connection with her employment in GTP, UPenn is required to pay its current and former employees 30% of cash and non-cash received in connection with licensing agreements for technology they develop while employed by UPenn.

- 252. While employed by UPenn, Dr. Faust was listed as an inventor on the Patent Application and Patent, obligating UPenn to compensate her in connection with licensing agreements for her technology.
- 253. UPenn licensed Dr. Faust's technology to Biogen, failed to notify her that her invention was being licensed, and did not provide her any compensation for the inclusion of her Patent Application in the licensing agreement.
- 254. Dr. Faust was the *only* inventor of a patent or patent application included in the Biogen licensing agreement that received no compensation.
- 255. Upon information and belief, UPenn has licensed Dr. Faust's Patent Application and Patent to approximately thirty-six other companies but, like with the Biogen licensing agreement, failed to provide Dr. Faust with notice of the licensing agreements for her technology or compensate her for its use as required by the Patent Policy.
- 256. More than ten days have passed since UPenn was obligated to pay Dr. Faust the amounts owed under the Patent Policy for licensing her technology to third-parties.
- 257. UPenn has also attempted to conceal from Dr. Faust the amount it actually owes her as a result of cash and non-cash payments received pursuant to agreements licensing her technology to third-parties.
- 258. Specifically, although UPenn admitted that it licensed Dr. Faust's technology to Biogen, UPenn only made this concession after Dr. Faust was informed by others that her Patent Application was licensed as part of the arrangement. Despite this concession, UPenn has failed to provide Dr. Faust with any information to allow her to ascertain the amounts owed to her under the Patent Policy resulting from the licensing agreement with Biogen.
 - 259. In addition to the licensing agreement with Biogen, upon information and belief,

UPenn licensed Dr. Faust's technology to RegenxBio as well as thirty-five other private companies.

- 260. As with the Biogen licensing agreement, however, UPenn is concealing information from Dr. Faust to allow her to ascertain exactly what companies UPenn has licensed her technology to and the compensation received in exchange. This information is necessary to ascertain how much UPenn owes her under the Patent Policy.
- 261. Accordingly, UPenn's failure to pay Dr. Faust "wages" resulting from its license of her technology, as set forth and agreed to in the Patent Policy, violates the WPCL.

PRAYER FOR RELIEF

WHEREFORE, Dr. Faust respectfully requests that this Court issue the following relief against Defendants:

- a. Enter final judgment in Dr. Faust's favor and against UPenn for monetary damages, including, but not limited to, all amounts necessary to compensate Dr. Faust for UPenn's wrongful, deceptive, and illegal conduct;
- b. Enter final judgment in Dr. Faust's favor and against Dr. Wilson for monetary damages, including, but not limited to, all amounts necessary to compensate Dr. Faust for Dr. Wilson wrongful, unethical, and illegal conduct;
- c. Enter final judgment in NxGEN's favor and against Dr. Wilson for monetary damages, including, but not limited to, all amounts necessary to compensate NxGEN for Dr. Wilson wrongful, unethical, and illegal conduct;
 - d. Award Dr. Faust complete ownership of her Patent Application and Patent;
- e. Award Dr. Faust attorney's fees and expenses under the WPCL against Defendants incurred as a result of Defendants' wrongful and illegal conduct;

- f. Order UPenn to provide Dr. Faust with accounting of all agreements which included a license or similar grant of use of any technology Dr. Faust invented while employed by UPenn which UPenn now or has ever had an ownership interest in and the amounts paid to UPenn under those agreements;
- g. Liquidated damages of 25% of the amount of wages UPenn has illegally failed to pay to Dr. Faust pursuant to the Patent Policy;
 - h. that this Court grant such other and further relief as it deems proper.

JURY TRIAL DEMANDED

Plaintiffs demand a jury trial on all claims and issues of the Complaint so triable.

DATE: January 29, 2024 Respectfully Submitted,

/s/Edward T. Kang

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EXHIBIT A

Patent and Tangible Research Property Policies and Procedures of the University of Pennsylvania

(Note: Words appearing in capital letters are defined in Article 5, unless they are defined in the document itself.)

Article 1. Preamble to the Policies and Procedures

- **1.0** The Trustees of the University of Pennsylvania affirm the following principles as the basis for governing the intellectual property created by faculty, employees, students and guest scholars of the University:
- **1.1** The mission of the University includes the stimulation of basic and applied research activities of faculty, employees and students of the University, and the dissemination of the results of their research for the purpose of adding to the body of knowledge and serving the public interest.
- **1.2** The University endeavors, where it deems appropriate, to secure intellectual property protection for the products of such research and to encourage commercial investment in and development of University intellectual property for the benefit of the public.
- **1.3** The community has endowed the University with certain privileges, resources and assets in the expectation that no single party will derive sole benefit or be unjustly enriched from what the community has endowed to the University.
- **1.4** The University as a non-profit organization endeavors to marshal its resources and exploit its assets to serve the public interest, and in so doing reinvests in the research enterprises of its faculty, employees and students. Members of the University community share in the University's responsibility to serve the public interest, and have a duty to disclose and assign their inventions.
- **1.5** The University is regularly the recipient of grants from the government, foundations or commercial enterprises for the support of research, and is subject to legal and contractual obligations imposed by these entities.
- **1.6** The University wishes to share the economic benefits of inventions or other intellectual property with the creators of such works in a way that is consistent with the research and educational mission of the University, and conforms to the University's obligations to regulatory authorities, research sponsors and licensees.
- **1.7** In protecting and managing its intellectual property assets, the University insists that the academic freedom of its faculty and students be preserved, and that collegiality and the open expression of ideas by and among members of the University community be encouraged.

Having established the principles governing intellectual property at the University of Pennsylvania, the Trustees hereby decree as follows:

Article 2. Policy and Procedures on Inventions and Patents

2.0 Policy Statement on Inventions and Patents. It is the policy of the University that all INVENTIONS, together with associated MATE-RIALS, which are conceived or reduced to practice by INVENTORS in the course of employment at the University, or result from work directly related to professional or employment responsibilities at the University, or from work carried out on University time, or at University expense, or with SUBSTANTIAL USE OF UNIVERSITY RESOURCES under grants or otherwise, are the property of the University, effective immediately as off the time such INVENTIONS are conceived or reduced to practice. INVENTORS hereby irrevocably assign to the University all right, title and interest in and to the INVENTIONS, MATERIALS and related patent applications and patents, and shall cooperate fully with the University in the preparation and prosecution of patent applications and patents. Patents, as they may be available on such INVENTIONS, may be applied for in any

country by the University. The University will exercise its ownership and management of such INVENTIONS, with or without economic benefit, with due regard for the principles set forth in the Preamble of this Policy. Procedures for implementation of this Policy, including a PARTICIPATION AGREEMENT, shall be developed and promulgated by the President of the University.

- **2.1 Procedures for the Administration and Management of Inventions and Patents.** The following procedures have been approved by the President as of the EFFECTIVE DATE:
- **2.1.1 Participation Agreement.** All faculty, emeritus faculty, visiting faculty or other visitors using research facilities (including but not limited to individuals on sabbatical from another university or research facility), researchers, adjunct faculty, postdoctoral employees and trainees, graduate students, and undergraduate students participating in research as employees or otherwise, and all salaried employees, shall execute a PARTICIPATION AGREEMENT (Appendix A) as a condition of employment, matriculation, participation in research, or use of University resources. Notwithstanding the above, an individual acknowledges that he or she is bound by this Policy by accepting or continuing University employment or by using University resources or facilities, and acknowledges that he or she hereby irrevocably assigns all right, title and interest in and to INVENTIONS, together with associated MATERIALS, and patent applications and patents which may issue, effective as of his or her first date of employment, matriculation, participation in research, or use of any University resources, whichever occurs first, regardless of whether he or she executes or executed a PARTICIPATION AGREEMENT. All students shall be advised of the University's intellectual property policies and procedures through publication and dissemination in the Penn Book: Resources, Policies and Procedures Handbook, and elsewhere.
- 2.1.2 Disclosure and Review. INVENTORS shall file INVENTION DISCLOSURES for all INVENTIONS covered by the PATENT POLICY promptly with the CENTER FOR TECHNOLOGY TRANSFER (CTT) at the University. CTT shall direct the review and management of the INVENTIONS under procedures and practices monitored by the EXECUTIVE COMMITTEE. CTT will undertake the review of the INVENTION DISCLOSURE within thirty (30) business days after the submission is completed, or, if requested by one or more INVENTORS, CTT will use reasonable efforts to undertake the review sooner if necessary to facilitate an upcoming publication, presentation, or other public disclosure which could adversely affect whether to pursue patent protection. CTT will convey its determination whether the University wishes to retain title to and pursue a patent application on an INVENTION as soon as practicable, in writing, after completing its review of a completed INVENTION DISCLOSURE submission, and use reasonable efforts to convey such decision to all INVENTORS within three (3) months after receiving a complete INVENTION DISCLOSURE submission.

If the University wishes to retain title to an INVENTION, upon the request of the INTELLECTUAL PROPERTY ADMINISTRATOR (IPA), an INVENTOR shall sign all documents necessary for the University to protect an INVENTION, file patent application(s), comply with applicable law in connection with such INVENTION, and confirm in writing the INVENTOR's prior assignment to the University of all right, title and interest in and to such INVENTION.

2.1.3 Inventions Outside the Policy. If a faculty member, emeritus faculty, visiting faculty, other visitor using research facilities, researcher, adjunct faculty, postdoctoral employee or trainee, graduate student, undergraduate student, or salaried employee (an "INDIVIDUAL") believes that a given INVENTION was made outside the scope of the PATENT POLICY, he or she shall provide the IPA with a written statement of the circumstances leading to the making of the

INVENTION. If, after reviewing the facts, the IPA determines that the INVENTION falls outside the scope of the PATENT POLICY, the IPA shall confirm in writing within thirty (30) days after receiving such written statement that the University has no right, title and interest to the INVENTION. If the facts are equivocal, or if the IPA believes that such INVENTION falls under the PATENT POLICY, the matter of ownership will be referred by the IPA or the INDIVIDUAL to the APPEALS BOARD, and the APPEALS BOARD shall make a recommendation to the President concerning ownership. Nothing in this PATENT POLICY is intended to imply or assume that an emeritus faculty member is making or has made a SUBSTANTIAL USE OF UNIVERSITY RESOURCES, or imply or assume that his or her invention falls under or outside the scope of this PATENT POLICY.

If an INDIVIDUAL makes an INVENTION which is outside the scope of the PATENT POLICY, and the IPA (or, if appealed, the President) agrees that such INVENTION is outside the scope of the PATENT POLICY, such INDIVIDUAL may request in writing to use the services of CTT in connection with the assessment, protection, and/or commercialization of such INVENTION. CTT, in its sole discretion, may decline, or may elect to use its personnel and services with respect to such INVENTION, on the condition that: (1) the INDIVIDUAL makes ASSIGNMENT to the University in a writing deemed sufficient by CTT; and (2) the INDIVIDUAL shall be deemed to be an INVENTOR and such invention shall be deemed to be an INVENTION within the scope of this PATENT POLICY, for all purposes (including but not limited to distributions), effective as of the date of ASSIGNMENT. The use of CTT shall be deemed to be a SUBSTANTIAL USE OF UNIVERSITY RESOURCES. CTT's decision to decline shall not be reviewable by the APPEALS BOARD.

2.1.4 Student Inventions.

2.1.4.1 INVENTIONS made by undergraduate students will remain the property of the students except when an INVENTION is made in the course of employment at the University, or results from work directly related to employment responsibilities at the University, or from work or research performed under a grant or other sponsorship, or undertaken with another INVENTOR who has a duty to make or has made ASSIGNMENT to the University. In such instances, undergraduate students are hereby deemed to have irrevocably transferred and assigned all of their right, title and interest in and to such INVENTION, effective as of the first date conceived or reduced to practice, regardless whether or when such student executes a PARTICIPATION AGREEMENT or other written agreement confirming assignment, and such undergraduate student shall be deemed an INVENTOR for purposes of sharing in distributions and otherwise pursuant to this Policy.

2.1.4.2 INVÉNTIONS made by graduate students in the course of employment at the University or research carried out in University laboratories as part of a post-baccalaureate or postdoctoral degree or non-degree program, or resulting from work directly related to the graduate student's employment, training or research responsibilities at the University, or from work or research performed under a grant or other sponsorship, or undertaken with another INVENTOR who has a duty to make or has made ASSIGNMENT to the University, shall be the property of the University and shall be subject to this PATENT POLICY. Any INVENTIONS arising from a dissertation submitted as a part of the requirements for a degree shall be subject to the PATENT POLICY. In such instances, graduate students shall be deemed to have hereby irrevocably made ASSIGNMENT to the University effective as of the first date of matriculation, and will be deemed an INVENTOR for purposes of distributions and otherwise pursuant to this PATENT POLICY, regardless of whether or when such graduate student executes or executed a PARTICIPATION AGREEMENT or other written agreement confirming assignment.

2.1.5 Return of Inventions.

2.1.5.1 Inventions Made without Outside Sponsorship. If an INVENTION is made without sponsorship of the federal government or other sponsor, and the University does not wish to pursue a patent application in the United States or other jurisdiction, or elects to abandon a pending patent application, or does not wish to own an issued patent on a given INVENTION, the IPA may, after consultation with and subject to the approval of the Vice Provost for Research, return all of the University's right, title and interest to the INVENTION, patent application or issued patent to the INVENTORS, subject

to and upon the terms and conditions set forth in Section 2.1.5.3.

2.1.5.2 Inventions Made with Outside Sponsorship. If an INVENTION is made with sponsorship of the federal government or other sponsor, and the University does not wish to pursue a patent application in the United States or other jurisdiction, or elects to abandon a pending patent application, or does not wish to own an issued patent on a given INVENTION, and the United States Government or other sponsor waives ownership rights, if any, the IPA may, after consultation with and subject to the approval of the Vice Provost for Research, return all of the University's right, title and interest to the INVENTION, patent application or issued patent to the INVENTORS, subject to any other rights retained by the United States Government or other sponsors, and subject to and upon the terms and conditions set forth in Section 2.1.5.3. If the INVENTION was made with sponsorship of the federal government, the INVENTORS are responsible for obtaining written approvals from the appropriate federal government representatives allowing the University to transfer the University's right, title and interest to the INVENTION to the INVENTORS, and providing such written approvals to CTT prior to any return to the INVENTORS. If the INVENTION was made with sponsorship of the federal government, to the extent applicable under then-current law, the INVENTOR shall use reasonable efforts to arrange for development and commercialization opportunities for the INVENTION, and otherwise comply with all laws regarding the INVENTION and any additional requirements imposed by the federal government when approving the transfer to the INVENTORS.

2.1.5.3 Conditions Regarding Return of Inventions. Prior to the University transferring its right, title and interest to an INVENTION and any related patent(s) and/or patent application(s), each INVENTOR and CTT shall enter into a written agreement including at least the following terms:

2.1.5.3.1 If the University elects to return an INVENTION made by more than one INVENTOR, the University will return an undivided interest in the whole, as defined by prevailing United States patent law, to each INVENTOR, unless directed otherwise in writing by all INVENTORS.

2.1.5.3.2 In every case in which an INVENTION is returned to an INVENTOR, the University hereby reserves a royalty free, non-exclusive, irrevocable right to practice the INVENTION for research, educational, and clinical care purposes, and to permit other academic institutions and not-for-profit research institutions to do the same.

2.1.5.3.3 The INVENTOR agrees to reimburse the University for all INVENTION ASSESSMENT COSTS. After the effective date of the return of the INVENTION, the University shall not be responsible for paying any ongoing INVENTION ASSESSMENT COSTS or other costs or expenses in connection with the returned INVENTION and any patents or patent applications for the returned INVENTION.

2.1.5.3.4 The INVENTOR (or, if there is more than one INVENTOR, the INVENTORS jointly and severally) shall pay the University fifteen percent (15%) of all GROSS COMPENSATION up to the first One Million Dollars of GROSS COMPENSATION, and ten percent (10%) of all GROSS COMPENSATION in excess of the first One Million Dollars of GROSS COMPENSATION, and report nonconfidential information at least annually to CTT regarding efforts to commercialize the returned INVENTION and GROSS COMPENSATION received.

2.1.5.3.5 Each INVENTOR shall represent and warrant that the INVENTOR has disclosed to CTT, as part of the INVENTION DISCLOSURE or otherwise: the best mode contemplated by the INVENTOR for carrying out the INVENTION; all facts and circumstances relevant to assessing the INVENTION DISCLOSURE and INVENTION; and has answered each question or inquiry from CTT about the INVENTION DISCLOSURE and INVENTION truthfully, to the best of the INVENTOR's knowledge and belief.

2.1.5.3.6 INVENTORS have the obligation to disclose to the IPA, and make ASSIGNMENT of, improvements on returned INVENTIONS at the time such improvements are conceived or reduced to practice, if such improvements are conceived or reduced to practice under circumstances subject to the PATENT POLICY.

2.1.5.3.7 Each INVENTOR shall acknowledge that the transfer of the University's interest in the INVENTION may raise issues under applicable University policies, including without limitation its conflict of interest policies and restrictions on use of University facilities and assets for private purposes, and that the return of an INVENTION does not

constitute a waiver of any term in any University policy or its applicability to the INVENTOR. The INVENTOR will agree not to use University resources, personnel, time, facilities or assets to further develop, protect or commercialize the returned INVENTION, unless permitted after review by the University's Conflict of Interest Standing Committee, and approved by the Vice Provost of Research.

2.1.5.3.8 Each INVENTOR will, and will cause any licensees or third persons participating in the development and commercialization of the INVENTION, to indemnify the University from any claims arising out of or resulting from or in connection with the INVENTION and its development and commercialization. The University will transfer its right, title and interest as is, without warranties.

2.2 Conveyance of Rights to Inventions.

- **2.2.1 Licensing.** The University may convey rights to its INVENTIONS through license agreements under the terms of which the University retains all right, title and interest in and to its INVENTIONS, while granting to a commercial entity the right to make, use, and/or sell products based on the INVENTION(S).
- 2.2.1.1 INVENTORS or other University faculty or employees involved in the licensing of an INVENTION to a prospective licensee shall disclose any fiduciary or financial interest in or contractual relationship with the prospective licensee to their Deans and Chairs, or their relevant administrative supervisor, in accordance with the applicable University policy on conflicts of interest. In addition, INVENTORS or other University faculty or employees involved in the licensing of an INVENTION to a prospective licensee shall disclose any fiduciary or financial interest in that prospective licensee to the IPA, who shall refer consideration of the matter to the EXECUTIVE COMMITTEE.
- **2.2.1.2** CTT will notify INVENTORS of prospective licensees in an early stage of the negotiation process. The final decision on whether to license an INVENTION, to whom to license an INVENTION, the terms in the agreements, and otherwise how to proceed with the license rests with CTT, and is not appealable to the APPEALS BOARD or otherwise.
- **2.2.2 Exceptions to Licensing.** Exceptions to the requirement that rights be conveyed through a license agreement shall be considered only in extreme or unusual circumstances and shall require approval by the President of the University.
- 2.3 Distributions. (For a hypothetical illustration of the distributions set forth in Sections 2.3.1 and 2.3.2, see Appendix C. Definitions for ADJUSTED CTT REVENUES FOR AN INVENTION, NET CTT INCOME FOR AN INVENTION, and other key definitions are in Article 5.)
- **2.3.1 Distribution of Adjusted CTT Revenues.** ADJUSTED CTT REVENUES for the INVENTION (defined in Section 5.0.1, but generally described as the PRO RATA SHARE of GROSS CTT REVENUES [defined in Section 5.0.13] minus AGGREGATE UNREIMBURSED IP EXPENSES [defined in Section 5.0.20]), shall be distributed as follows:
- **2.3.1.1** The INVENTORS PERSONAL SHARE shall be thirty percent (30%) of the ADJUSTED CTT REVENUES for the INVENTION (See Sec. 2.3.4).
- **2.3.1.2** The INVENTORS RESEARCH ACTIVITY SHARE shall be twelve and one-half percent (12.5%) of the ADJUSTED CTT REVENUES for the INVENTION (See Sec. 2.3.5).
- **2.3.2 Distribution of Net CTT Income.** NET CTT INCOME for the INVENTION (defined in Section 5.0.22, but generally described as the amount remaining after distributions in Section 2.3.1, minus the PRO RATA SHARE of AGGREGATE CTT OPERATING COSTS [defined in Section 5.0.3]) shall be distributed as follows:
- **2.3.2.1** The DEPARTMENTS OF INVENTORS SHARE shall be twenty percent (20%) of the NET CTT INCOME for the INVENTION (See Sec. 2.3.6).

- **2.3.2.2** The SCHOOLS OF INVENTORS SHARE shall be forty percent (40%) of the NET CTT INCOME for the INVENTION (See Sec. 2.3.7)
- **2.3.2.3** The UNIVERSITY RESEARCH SHARE shall be forty percent (40%) of the NET CTT INCOME for the INVENTION (See Sec. 2.3.8).
- 2.3.3 Allocation of the EQUITY POOL. (Procedures governing licensing transactions for EQUITY are set forth in Appendix B). Under license agreements for which the University has negotiated an EQUITY POOL, where, in accordance with Appendix B.4, EQUITY will be issued directly to the INVENTOR(S), the INVENTORS shall receive thirty percent (30%) of the EQUITY POOL, unless one or more INVENTOR receives EQUITY from the licensee outside of the EQUITY POOL. An INVENTOR who receives EQUITY from the licensee outside of the EQUITY POOL except with approval of the University. The IPA shall make a recommendation in this regard to the Vice Provost for Research, who shall make a determination in consultation with the relevant Deans. Furthermore, if one or more INVENTOR receives EQUITY outside of the EQUITY POOL, the portion of the EQUITY POOL to be received by the other INVENTORS shall be reduced in proportion to the contribution to the licensed INVENTIONS, as determined by CTT, made by the INVENTORS who receive EQUITY outside of the EQUITY POOL.
- **2.3.3.1** INVENTORS receiving EQUITY from the EQUITY POOL or outside the EQUITY POOL may also receive INVENTORS PERSONAL SHARE of ADJUSTED CTT REVENUES FOR THE INVENTION. An exception to this may arise in certain circumstances, such as when INVENTORS receive founders EQUITY, EQUITY for consulting services or other consideration from the licensee. In such cases, the University may determine that such INVENTORS shall not receive some or any of the INVENTORS PERSONAL SHARE of ADJUSTED CTT REVENUES for the INVENTION. The IPA shall make a recommendation in this regard to the Vice Provost for Research, who shall make a determination in consultation with the relevant Deans.
- **2.3.3.2 Non-cash component of License.** Any tangible, non-cash considerations (except EQUITY) in licenses will be distributed by CTT on a case by case basis, in consultation with the INVENTOR(S), Vice Provost for Research, and the relevant Dean(s).
- 2.3.4 Rules Governing the Inventors Personal Share. The IN-VENTORS PERSONAL SHARE of ADJUSTED CTT REVENUES for the INVENTION, under Section 2.3.1.1, shall be distributed among all INVENTORS (if more than one), as the INVENTORS unanimously designate in writing to the IPA. If the INVENTORS fail to make such unanimous written designation before the license agreement is executed, the INVENTORS PERSONAL SHARE of ADJUSTED CTT REVENUES shall be distributed among all INVENTORS as CTT, in its sole discretion, shall designate. The INVENTORS share of the EQUITY POOL under Section 2.3.3 shall be distributed among all INVENTORS entitled to share in the EQUITY POOL (if more than one), as such INVENTORS unanimously designate in writing to the IPA. If the INVENTORS entitled to share in the EQUITY POOL fail to make such unanimous written designation before the license agreement is executed, the INVENTORS share of the EQUITY POOL shall be distributed among INVENTORS entitled to share in the EQUITY POOL as CTT, in its sole discretion, shall designate.
- **2.3.4.1** If an INVENTOR ceases employment at and association with the University, his or her designated portion of the INVENTORS PERSONAL SHARE of ADJUSTED CTT REVENUES under Section 2.3.1.1 and of the INVENTORS share of the EQUITY POOL under Section 2.3.3 shall remain payable to such INVENTOR. If an INVENTOR dies, his or her designated portion of the INVENTORS PERSONAL SHARE shall remain payable to his or her estate.
- **2.3.5** Rules Governing the Inventors Research Activity Share. The INVENTORS RESEARCH ACTIVITY SHARE, when the INVENTORS are faculty, shall be used only for research purposes approved by the Department Chair(s) of the relevant Department(s).
- **2.3.5.1** The INVENTORS RESEARCH ACTIVITY SHARE shall be divided among the INVENTORS (if more than one) in the same proportion

- as the INVENTORS PERSONAL SHARE is divided among the INVENTORS (the "DESIGNATED PROPORTION"), unless the INVENTORS unanimously request in writing, and the Dean(s) of the relevant School(s) and Vice Provost for Research approve, some other distribution.
- **2.3.5.2** If a sole faculty INVENTOR is no longer employed by or associated with the University, the INVENTORS RESEARCH ACTIVITY SHARE shall be distributed to the INVENTOR'S School at the University to support research in the School. If there is more than one faculty INVENTOR, and one of those INVENTORS is no longer employed by or associated with the University, that share shall be distributed evenly to support the research activity of the INVENTORS who remain. If no faculty INVENTORS remain employed by or associated with the University, the INVENTORS RESEARCH ACTIVITY SHARE will be distributed to the INVENTORS School(s) to support research in the School(s).
- 2.3.5.3 When an INVENTOR is an undergraduate student, the INVENTORS RESEARCH ACTIVITY SHARE shall be distributed to the University's Center for Undergraduate Research and Fellowships (CURF) or its successor organization, or if no successor organization, to the Provost's Office to be used to further and support research by undergraduate students, through a budget approved by the Provost. When INVENTORS are graduate students or postdoctoral employees or trainees, the corresponding INVENTORS RESEARCH ACTIVITY SHARE shall be distributed to the laboratory to which they are primarily assigned or in which they primarily conducted the research leading to the INVENTION. If such INVENTORS do not have a primary laboratory affiliation, their corresponding INVENTORS RESEARCH ACTIVITY SHARE shall be distributed to their Department. Amounts so distributed shall be used to further the education and research activity of the INVENTOR while at the University and/or for other research purposes through a budget approved by the Department Chair(s) of the relevant Department(s).
- 2.3.5.4 When an INVENTOR is an emeritus faculty member at the time of the INVENTION, the INVENTORS RESEARCH ACTIVITY SHARE shall be distributed equally between the INVENTOR'S last SCHOOL and the INVENTOR's last Department before assuming emeritus status, unless that emeritus faculty INVENTOR, and his/her Dean and Department Chair, agree in writing upon a different distribution, after a meeting with participation by the IPA and a representative from the Vice Provost for Research's Office. Such different distribution may include, without limitation, payment of all or a portion of such INVENTORS RESEARCH ACTIVITY SHARE to the emeritus faculty as part of his or her INVENTORS PERSONAL SHARE. Any such proposed different distribution of an INVENTORS RESEARCH ACTIVITY SHARE for an emeritus faculty INVENTOR is subject to review and approval by the Vice Provost for Research. The emeritus faculty INVENTOR may appeal the inability to reach an agreement upon a different distribution, or any disapproval by the Vice Provost for Research, to the Appeals Board. Amounts received by the School and/or the Department shall be used for research purposes only through a budget approved by the Dean(s) of the relevant School(s).
- **2.3.6 Rules Governing the Departments of Inventors Share.** The DEPARTMENTS OF INVENTORS SHARE shall be used only for research purposes through a budget approved by the Dean(s) of the relevant School(s).
- **2.3.6.1** If an INVENTION is made by INVENTORS within a Division, Research Center, or Institute, the Department(s) of the INVENTORS may make an equitable distribution of income to that Division, Research Center, or Institute from the DEPARTMENTS OF INVENTORS SHARE.
- **2.3.6.2** If an INVENTION is made by INVENTORS from different Departments, the DEPARTMENTS OF INVENTORS SHARE shall be divided among the Departments in the DESIGNATED PROPORTION. A Department shall retain its portion of the DEPARTMENTS OF INVENTORS SHARE if an INVENTOR from that Department is no longer employed by or associated with the Department or the University.
- **2.3.7 Rules Governing the Schools of Inventors Share.** The SCHOOLS OF INVENTORS SHARE may be used for any research pur-

- pose designated by the Dean(s) of the School(s). At the discretion of the Dean(s), any portion of the SCHOOLS OF INVENTORS SHARE may be distributed to Department(s) of the INVENTORS or used to support the research activity of the INVENTORS.
- **2.3.7.1** If an INVENTION is made by INVENTORS from different Schools, the SCHOOLS OF INVENTORS SHARE shall be divided among the Schools in the DESIGNATED PROPORTION. A School will retain its portion of SCHOOLS OF INVENTORS SHARE if an INVENTOR from that School is no longer employed by or associated with the School or the University.
- **2.3.8 Rules Governing the University Research Share.** The UNIVERSITY RESEARCH SHARE shall be used for the general support of research at the University as determined by the Provost. The Provost will release periodic reports describing the use of these funds.
- **2.3.9 Periodic Reports of Use of Funds to Support Research.** The Deans of each School that receives funds during the Fiscal Year as SCHOOLS OF INVENTORS SHARES or DEPARTMENTS OF INVENTORS SHARES shall release a report to the Vice Provost for Research at least once during the subsequent Fiscal Year describing the use of these funds for research purposes and the support of research.
- 2.3.10 Invention Revenue Distribution for Non-Academic Inventors. When an INVENTOR is other than a faculty member, emeritus faculty, employee of an academic laboratory, student or postdoctoral employee or trainee, the distribution of ADJUSTED CTT REVENUES FOR THE INVENTION (other than the INVENTORS PERSONAL SHARE) and NET CTT INCOME for the INVENTION shall be determined by the President on a case-by-case basis with a recommendation from the IPA together with the Executive Vice President, the Vice Provost for Research, the Chief Executive Officer of the Medical Center (where applicable), relevant Deans, and/or other involved administrative heads.
- **2.3.11 INVENTORS with Joint Appointments.** If an INVENTOR has joint appointments in two or more Schools or Departments and there is no primary appointment (for example only, a Penn Integrates Knowledge professor), the Deans shall determine an equitable apportionment of that INVENTOR's portion of the INVENTORS RESEARCH ACTIVITY SHARE, DEPARTMENTS OF INVENTORS SHARE, and SCHOOLS OF INVENTORS SHARE, unless the Deans of such Schools had previously agreed on an allocation for such INVENTOR.

2.4 Implementation of Procedures for Distributions.

- **2.4.1** Inventions Disclosed and Licensed After the Effective Date. Distributions from all INVENTIONS disclosed and licensed on or after the EFFECTIVE DATE shall be governed by the procedures in Section 2.3.
- **2.4.2** Inventions Disclosed Before the Effective Date, but Licensed After the Effective Date. Distribution of income from all INVENTIONS disclosed before the EFFECTIVE DATE, but not yet subject to a license agreement as of the EFFECTIVE DATE, shall be governed by the procedures in Section 2.3.
- **2.4.3** Inventions Disclosed and Licensed Before the Effective Date. All distributions during and after the fiscal year that the revised policy becomes effective, including distributions for an INVENTION whose disclosure or licensing was completed prior to the EFFECTIVE DATE of the revised policy, will be made according to the revised policy, and shall thus be governed by the procedures in Section 2.3.
- **2.5 Administration of Distributions and Reporting.** Distributions, with a report outlining how the amounts were calculated, shall be made to each recipient within forty-five (45) days after the end of the FISCAL YEAR. The University will not pay interest on amounts received and held by the University pending distribution.
- **2.6 Use of Outside Facilities.** Faculty members, employees or students who use research facilities at another institution or a corporation (including, without limitation, when on sabbatical from the University or as visiting faculty or visiting researchers) shall contact the IPA prior to

commencing such use, for assistance in evaluating the policies of the host assistance should not be construed to be advice or counsel as to the faculinstitution or corporation as appropriate. Graduate students who are conducting research in commercial research facilities should obtain a written assurance of their right to publish the results of their research. Faculty members, employees or students who engage in outside employment or consulting agreements are referred to Article 3.

Article 3. Policy and Procedures Relating to **Consulting and Outside Activities**

- **3.1 Consulting Policy.** As stated in the University policy entitled "Conflict of Interest Policy for Faculty Members" (Section II.E.10 of the Handbook for Faculty and Academic Administrators), the University recognizes the value to the institution and to its faculty of permitting the faculty to engage in extramural consulting activities. These activities offer the potential of strengthening the competence and expertise of the faculty as scholars, as well as the potential of developing the intellectual property owned by the University. In all circumstances where consulting activities may result in the creation of an INVENTION, the following procedures and principles apply:
- **3.1.1** To ensure that the consulting activities are consistent with faculty members' professional obligations to the University, responsibilities with respect to the avoidance of conflicts of interest, and to their commitments for teaching and research, faculty members should comply with the provisions of Section II.E.10 of the Handbook which include both the prospective disclosure of the potential consulting activities to their Department Chairs and School Deans, as well as written reports on such activities as set forth in the Handbook, or other related procedures established by their School or Department.
- 3.1.2 In any case where the faculty member, Department Chair, or Dean believes that there is a potential conflict of interest or conflict of commitment, the matter shall be referred to the University Conflict of Interest Standing Committee. The Committee shall review the matter and make recommendations to the Provost, or his/her designee, who has the authority to approve, modify, or disapprove any consulting arrangement that raises a potential conflict. In determining whether review by the Conflict of Interest Standing Committee is appropriate, the faculty member, Department Chair, or Dean may consult with the General Counsel.
- 3.1.3 In all consulting relationships, faculty members have the duty to protect any intellectual property owned by the University and the ability of the University to fulfill its obligations to government funding agencies and commercial and non-commercial sponsors of research.
- **3.2 Consulting Agreements.** Except to the extent set forth in Section 3.4 below, faculty members contemplating entering into a consulting agreement shall ensure that his/her obligations under the PATENT POL-ICY are not compromised and the University's rights are protected. Specifically, faculty members have the responsibility to ensure that the following terms are not part of any consulting agreement: (1) confidentiality provisions that prevent the individual from publishing research or from reporting results of University research to research sponsors; (2) confidentiality provisions that prevent the individual from providing TANGIBLE RESEARCH PROPERTY or other deliverables to a University research sponsor or other entity as required by federal law, federal regulation, or by sponsor agreement; (3) intellectual property provisions that preclude the consultant from assigning any inventions that arise out of the consulting relationship to the University; and (4) any provisions that are designed to circumvent University policies and procedures for the disclosure, review and approval of sponsored research projects or other University policies concerning intellectual property. Moreover, in the context of academic research, it may be difficult to avoid commingling of research activity or resources with services provided under the consulting agreement. It is the obligation of the faculty member in negotiating the consulting agreement to ensure that any consulting relationship entered into protects against any such commingling of research or resources.
- 3.2.1 Faculty members may seek the assistance of the IPA in determining whether a proposed agreement conforms to these guidelines. Such

ty member's personal interests in the consulting agreement.

- 3.3 Consulting Activity with a Company Providing Sponsored Research. In addition to the procedures set forth above, if a faculty member contemplates a consulting relationship with a company that sponsors research for that individual at the University, the proposed consulting agreement shall be disclosed to the IPA, along with an explanation of the nature and scope of the individual's anticipated activities. The IPA shall refer the matter to the University Conflict of Interest Standing Committee, with copies of all applicable documentation to relevant Deans, Department Chairs and the General Counsel, or his/her designee, for review. The Committee shall make recommendations to the Provost, or his/her designee, who shall have the authority to approve, modify or disapprove any such proposed agreements.
- 3.4 Exception to the General Consulting Policy. Notwithstanding the policies articulated in Article 2.0 above, and in the general consulting policy set forth above, the University recognizes that faculty members may seek to undertake consulting engagements, at the direction of a firm or entity other than the University, that may require that any resulting INVENTIONS be assigned to the sponsor of the engagement. While not providing the University with ownership of the INVENTION, these consulting engagements may nevertheless provide significant benefits to faculty members and to the University. For this reason, it is the policy of the University to authorize a Dean, in his or her discretion, to permit these consulting engagements, without claiming any ownership interest in the INVENTION for the University, under the follow conditions.
- 3.4.1 Conditions for Consulting Engagements. In order for a faculty member and his or her particular proposed consulting engagement to be eligible for consideration under this exception to the consulting policy: (1) The engagement must be consistent with the policy on "Conflict of Interest Policy for Faculty Members" (Handbook for Faculty and Academic Administrators, II.E.10); (2) no undergraduate or graduate students may be involved in the engagement; (3) the faculty member must be compensated in cash, and the compensation must be fixed and not variable, must reflect the fair market value of the consulting to be performed, and must not vary according to the perceived value of INVENTIONS assigned. (The faculty member may not be compensated with EQUITY or any form of contingent or variable compensation, including but not limited to options, warrants, royalties, or a payment that varies based upon the sales, revenues or other perceived success of an INVENTION or product or service based upon such INVENTION); (4) the faculty member may not have a SIGNIFICANT EQUITY INTEREST in the sponsoring entity or an affiliate of that entity; (5) performance of the engagement may not involve the use of any University facilities, personnel, equipment or assets, except for de minimus amounts or uses; and (6) the terms of the engagement must not conflict with any existing commitments under sponsored research or otherwise for ownership of resulting inventions, and shall not make assignment of ownership of any future INVENTION not conceived and reduced to practice during the term of, and as a direct and sole result of performing, the consulting engagement.
- 3.4.2 Procedures for Disclosing Consulting Engagements. To qualify for consideration under Section 3.4 and allow for meaningful advance review, the specific terms of the proposed agreement must be disclosed to the Department Chair and the Dean at a reasonable time prior to the commencement of the engagement and, in all circumstances, prior to the faculty member entering into any legally binding agreement to engage in the engagement. The engagement and its terms must be reported to the Department Chair and the Dean, in writing, on an annual basis. If the Dean determines, after consultation with the Department Chair and the IPA that criteria set forth in Section 3.4.1 have been met, the Dean may approve the engagement, in his or her discretion, but is not required to approve the engagement. If the Dean determines that the criteria set forth in Section 3.4.1 have not been met, or otherwise declines to approve the engagement, the Dean should so notify the faculty member, who may then seek review of the decision by the Provost (the Dean's determination, and any determination by the Provost, shall not be appealable to the APPEALS BOARD or otherwise). The Dean should notify the faculty member of his or her decision promptly, and if

possible, within thirty (30) days of receipt of the disclosure.

- **3.4.3 Procedures for Waiver of Conditions.** Should a faculty member seek to undertake a consulting engagement that is neither within the general consulting policy, nor satisfies the criteria of Section 3.4.1, the faculty member may request a waiver from the Dean to permit the faculty member to enter into the consulting arrangement. After consulting with the General Counsel, the Provost or his/her designee and the IPA, the Dean may grant the waiver. If the Dean determines that, under the facts and circumstances of the particular case, the waiver would undermine the principles underlying the PATENT POLICY, violate any legal or regulatory requirement, present an unmanageable conflict of interest or otherwise violate University policy, the Dean should deny the waiver and notify the faculty member. The decision should be made and communicated to the faculty member as promptly as possible, generally within fifteen (15) days of receipt of the waiver request. Should the waiver be denied, the faculty member may appeal the decision to the Provost, whose decision shall be final and not appealable to the APPEALS BOARD or otherwise.
- **3.4.4 Liability when Consulting.** Faculty members entering into consulting engagements should understand that they are undertaking personal responsibilities and may be assuming certain personal risks of liability. For that reason, all faculty members may wish to seek personal legal counsel, at their own expense, for the purpose of reviewing proposed consulting agreements so as to protect their personal interests. To the extent, however, that faculty members are availing themselves of this exception to the PATENT POLICY, they are doing so entirely at their own risk and are not, in any way, protected by the University. For this reason, faculty members are well advised to seek personal legal advice before entering into such a consulting relationship.
- **3.5** Application of the Consulting Policy and Procedures to Administrators and Staff. The University recognizes the value to the institution and of permitting administrators and staff, as well as faculty, to engage in extramural consulting activities, under certain circumstances. Except as specifically set forth below, the above policy applies to administrators and staff who seek to enter into consulting engagements.
- **3.5.1** Staff and administrators who contemplate entering into consulting engagements are subject to the "Guidelines for Extramural Activities, Associations, and Interest for Staff" (*Human Resources Policy Manual*, Policy No. 006, effective 2/1/1990) and should follow the procedures for disclosure and clearance of potential conflict of interest issues set forth in those guidelines.
 - **3.5.2** Section 3.4 does not apply to administrators or staff.
- **3.6** Sections 3.1 through 3.5, inclusive, set forth how decisions and other actions may be appealed, and, therefore, the APPEALS BOARD shall not have any jurisdiction regarding a decision or action arising under or out of this Article 3.

Article 4. Policy and Procedures Relating to Tangible Research Property

- **4.0 Policy Statement on Tangible Research Property.** TANGIBLE RESEARCH PROPERTY made by INVESTIGATORS in the course of employment at the University, or work or research directly related to professional, educational or employment responsibilities, or work or research carried out on University time, or at University expense or with SUBSTANTIAL USE OF UNIVERSITY RESOURCES under grants or otherwise, is the property of the University. INVESTIGATORS hereby irrevocably assign to the University all right, title and interest in and to the TANGIBLE RESEARCH PROPERTY and shall cooperate fully with the University in the preparation and prosecution of patents or other intellectual property protection, if available and applicable. The University and INVESTIGATORS will endeavor to make such property available to the research community on a reasonable basis, consistent with other University policies, procedures and legal obligations, and pursuant to a written agreement in a form approved by the Office of the General Counsel, including but not limited to a materials transfer agreement, license agreement, deposit to a research or data bank repository, or other form of agreement.
 - 4.1 Disclosure to CTT. INVESTIGATORS shall disclose new

TANGIBLE RESEARCH PROPERTY promptly to CTT.

- **4.2 Revenues from Transfer of Tangible Research Property.** Unless prohibited by law or the terms of a grant, award or contract under which TANGIBLE RESEARCH PROPERTY is developed:
- **4.2.1** If the TANGIBLE RESEARCH PROPERTY is protected by one or more patent(s) anywhere in the world, or CTT has filed one or more patent application(s) anywhere in the world claiming patent protection for an aspect of such TANGIBLE RESEARCH PROPERTY, then such TANGIBLE RESEARCH PROPERTY shall be treated as much as possible as an INVENTION for purposes of this PATENT POLICY, and all GROSS CTT REVENUES from such TANGIBLE RESEARCH PROPERTY shall be distributed pursuant to Section 2.3 above as if such TANGIBLE RESEARCH PROPERTY were an INVENTION, including but not limited to a deduction from GROSS CTT REVENUES of AGGREGATE UNREIMBURSED IP EXPENSES prior to distribution of the ADJUSTED CTT REVENUES for such TANGIBLE RESEARCH PROPERTY.
- In any case not governed by Section 4.2.1 above (for example, where CTT did not file any patent application anywhere in the world claiming patent protection for an aspect of the TANGIBLE RESEARCH PROPERTY), CTT shall determine the GROSS CTT REVENUES for the TANGIBLE RESEARCH PROPERTY. Then, CTT shall determine, in conjunction with the INVESTIGATORS and the appropriate University staff, the applicable TANGIBLE RESEARCH PROPERTY DIRECT GENERATION COSTS. The TANGIBLE PROPERTY DIRECT GENERATION COSTS. The TANGIBLE RESEARCH PROPERTY DIRECT GENERATION COSTS shall be reimbursed to the University account(s) of the INVESTIGATOR(S) and/or such other School, Department or other accounts from which portions of the TANGIBLE RESEARCH PROPERTY DIRECT GENERATION COSTS were paid. The amount remaining, if any, after deducting the TANGIBLE RESEARCH PROPERTY DIRECT GENERATION COSTS from the GROSS CTT REVENUES for the TANGIBLE RESEARCH PROPERTY, shall be defined as the ADJUSTED CTT REVENUES for such TANGIBLE RESEARCH PROPERTY. The ADJUSTED CTT REVENUES for the TANGIBLE RESEARCH PROPERTY or NET CTT INCOME for the TANGIBLE RESEARCH PROPERTY (as the case may be) shall be distributed in accordance with Section 2.3 above (substituting the INVESTIGATOR(S) for the INVENTOR(S) and the TANGIBLE RESEARCH PROPERTY for the INVENTION, where applicable in applying this PATENT POLICY):
- **4.2.2.1** Thirty percent (30%) of ADJUSTED CTT REVENUES for the TANGIBLE RESEARCH PROPERTY as the INVESTIGATORS PERSONAL SHARE (see Sec. 2.3.4)
- **4.2.2.2** Twelve and one-half percent (12.5%) of ADJUSTED CTT REVENUES for the TANGIBLE RESEARCH PROPERTY as the INVESTIGATORS RESEARCH ACTIVITY SHARE (see Sec. 2.3.5)
- **4.2.2.3** Twenty percent (20%) of NET CTT INCOME for the TANGIBLE RESEARCH PROPERTY as the DEPARTMENTS OF INVESTIGATORS SHARE (see Sec. 2.3.6)
- 4.2.2.4 Forty percent (40%) of NET CTT INCOME for the 4.0 Policy Statement on Tangible Research Property. TANGIBLE TANGIBLE RESEARCH PROPERTY as the SCHOOLS OF RESEARCH PROPERTY made by INVESTIGATORS in the course of INVENTORS SHARE (see Sec. 2.3.7)
 - **4.2.2.5** Forty percent (40%) of NET CTT INCOME for the TANGIBLE RESEARCH PROPERTY as the UNIVERSITY RESEARCH SHARE (see Sec. 2.3.8).
 - 4.3. Program Income and Sponsored Awards. INVESTIGATORS and CTT shall report any GROSS CTT REVENUES from TANGIBLE RESEARCH PROPERTY to the Office of Research Services for a determination whether such revenues must be reported to a funding agency or sponsor as program income. In those circumstances in which GROSS CTT REVENUES from the TANGIBLE RESEARCH PROPERTY may be considered program income under federal law, or grant, award or contract terms, or where the distribution formula set forth in Sections 4.2.1 and 4.2.2 above would cause the University to violate law or grant, award or contract terms, the UNIVERSITY will comply with applicable law and the sponsor's terms in the use and/or distribution of any GROSS CTT REVENUES as program income or otherwise, and otherwise equitably share any ADJUSTED CTT REVENUES for such

TANGIBLE RESEARCH PROPERTY, if any.

Article 5. Definitions and Miscellaneous.

- **5.0.1 TOTAL ADJUSTED CTT REVENUES** means GROSS CTT REVENUES minus AGGREGATE UNREIMBURSED IP EXPENSES. **ADJUSTED CTT REVENUES FOR AN INVENTION** means the PRO RATA SHARE of the TOTAL ADJUSTED CTT REVENUES.
- **5.0.2 ADJUSTED PROCEEDS FOR AN INVENTION** means ADJUSTED CTT REVENUES FOR AN INVENTION, minus the INVENTORS PERSONAL SHARE and minus the INVENTORS RESEARCH ACTIVITY SHARE.
- **5.0.3** AGGREGATE CTT OPERATING COSTS means all of CTT's internal or out-of-pocket expenses to operate CTT, as allocated to and determined by the University, during a Fiscal Year, including, without limitation: salaries, benefits and other personnel costs; expenses related to licensing and distribution, and attempts to license and/or distribute, INVENTIONS, TANGIBLE RESEARCH PROPERTY, copyrightable works, and trademarks; fees and expenses paid to third persons (excluding any amounts included within IP EXPENSES); overhead expense; finder's fees or commissions; EQUITY or other consideration paid or due to patent management organizations; expenses in connection with the sale, investment or management of EQUITY or the EQUITY POOL; litigation or dispute resolution costs and expenses (not otherwise included within IP EXPENSES); and consideration paid or due third persons as a result of settlement of or judgment in a dispute; applicable taxes (if any), and other operating expenses the University allocates to CTT. Notwithstanding the foregoing sentence, AGGREGATE CTT OPERATING COSTS excludes UNREIMBURSED IP EXPENSES and REIMBURSED IP EXPENSES.
- **5.0.4 APPEALS BOARD** means a group of nine (9) voting members (seven [7] standing members and two [2] ad hoc members). The seven standing members shall be comprised of: one (1) voting Chair, appointed by the Faculty Senate and who shall be a Standing Faculty member; four (4) administrators (each appointed by the Vice Provost for Research); and two (2) term faculty appointed by the Faculty Senate The two (2) ad hoc members shall be faculty selected for expertise by the Dean(s) of the relevant School(s) or the Chair(s) of the relevant Departments(s), except that if one or more of the individuals involved in the appeal is an emeritus faculty, the two ad hoc voting members selected by the Dean(s) or Department Chair(s) shall be emeritus faculty, and if one or more of the individuals involved in the appeal is a graduate student, the two ad hoc voting members selected by the Dean(s) or Department Chair(s) shall be graduate students. In addition, the APPEALS BOARD shall include one nonvoting member ex officio, who shall be an attorney from the Office of the General Counsel and appointed by the General Counsel. The APPEALS BOARD shall be staffed by the Office of the Vice Provost for Research.
- **5.0.5 ASSIGNMENT** means the execution of a written agreement by an INVENTOR assigning all of the INVENTOR'S right, title and interest in and to an INVENTION or TANGIBLE RESEARCH PROPERTY. INVENTIONS are deemed automatically and irrevocably assigned, effective as of the time they are conceived or reduced to practice, regardless of whether or when such individual executes a PARTICIPATION AGREEMENT or other written agreement confirming assignment.
- **5.0.6** CENTER FOR TECHNOLOGY TRANSFER (CTT) means the administrative unit, under the direction of the INTELLECTUAL PROPERTY ADMINISTRATOR, which is responsible for the receipt, review, management and administration of intellectual property matters of the University.
- **5.0.7 EFFECTIVE DATE** means the earlier of July 1, 2010 or the date this version of this PATENT POLICY was adopted by the Trustees of the University.
- **5.0.8** EQUITY means ownership interests or securities, including but not limited to shares of stock or securities; stock options; warrants or any other rights to purchase stock or securities; debt instruments; partnership interests in a general or limited partnership; or membership interests in a limited liability company or partnership.
 - 5.0.9 EQUITY POOL means the total allotment of EQUITY

- negotiated by the University as consideration for a license of the University's interests in an INVENTION or TANGIBLE RESEARCH PROPERTY
- **5.0.10 EXECUTIVE COMMITTEE** is appointed by the Provost in consultation with the Vice Provost for Research, and chaired by the Vice Provost for Research. The EXECUTIVE COMMITTEE is comprised of the INTELLECTUAL PROPERTY ADMINISTRATOR, *ex officio*; the Vice Provost for Research; the Dean of the School of Medicine or his/her designee; one faculty from each of the School of Arts and Sciences and the School of Engineering and Applied Science; one at-large faculty; and an attorney from the Office of the General Counsel selected by the General Counsel, who shall be non-voting and *ex officio*. The Executive Committee's charge is to provide oversight and steering of the technology transfer process. Together with the Vice Provost for Research, the Executive Committee will assist the Provost in setting the operating budget for CTT.
- **5.0.11 FISCAL YEAR** means the period from July 1 through June 30 (or, should the University adjust its fiscal year, the same period as the University's then-current fiscal year for federal tax purposes.)
- **5.0.12** GROSS COMPENSATION means all cash or other compensation received or to which someone is entitled due to or arising out of or related to or in connection with the licensing, sale, development, commercialization, or other exploitation of the INVENTION, including without limitation royalties, sales receipts, upfront payments, option fees, milestone payments, equity proceeds, other securities or investments, infringement or settlement proceeds, or other forms of monetization or compensation.
- **5.0.13 GROSS CTT REVENUES** means all gross revenues actually received by CTT during the previous Fiscal Year from all agreements arising out of or related to or in connection with the licensing, development, commercialization, or other exploitation of an INVENTION or TANGIBLE RESEARCH PROPERTY, or intellectual property related to an INVENTION or TANGIBLE RESEARCH PROPERTY, whether involving patents, know-how, trademarks, copyrights, and/or other forms of intellectual property, but excluding: (1) payments made to the University under sponsored research agreements or research awards, grants and contracts; (2) revenues payable to a third party sponsor or funder pursuant to a funding agreement, where performance of the sponsored or funded research directly gave rise to the INVENTION or TANGIBLE RESEARCH PROPERTY; (3) revenues related to the licensing of a University or Penn Medicine trademark (e.g., trademark royalties in connection with Penn-branded apparel, etc.) and unrelated to the licensing, development or other exploitation of an INVENTION or TANGIBLE RESEARCH PROPERTY; and (4) consideration payable to a university or other third party related to co-inventor(s) or contributors to INVENTIONS or TANGIBLE RESEARCH PROPERTY having a duty to assign to such university or other third party (for example only, revenues payable to another institution due to joint inventorship or inter-institutional arrangements.) GROSS CTT REVENUES includes, without limitation: license fees; license maintenance fees; minimum royalties; sublicense payments; milestone payments; option fees; royalties on sales of products and services; proceeds realized from the sale or other disposition of EQUITY from an EQUITY POOL; dividends and other monetary distributions related to EQUITY from an EQUITY POOL; and settlements of lawsuits or intellectual property disputes with third parties related to an INVENTION DISCLOSURE, INVENTION or TANGIBLE RESEARCH PROPERTY. GROSS CTT REVENUES does not include REIMBURSED IP EXPENSES
- **5.0.14** INTELLECTUAL PROPERTY ADMINISTRATOR (IPA) means the Executive Director of CTT (or his or her successor, as designated by the Vice Provost for Research).
- **5.0.15 INVENTION** means and includes technical information, trade secrets, developments, discoveries, inventions, know-how, methods, techniques, formulae, data, processes and other proprietary ideas or matter. **5.0.16 INVENTION DISCLOSURE** means the written submission to
- **5.0.16 INVENTION DISCLOSURE** means the written submission to the IPA, on standard invention disclosure forms available from CTT, of a written description of any INVENTION that an INVENTOR believes he or she has made.
- **5.0.17 INVENTORS** means University faculty, emeritus faculty, visiting faculty or researchers, adjunct faculty, postdoctoral employees or trainees, or other employees, or students, or others who individually or jointly make an

INVENTION subject to the PATENT POLICY and who meet the criteria for inventorship under United States patent laws and regulations.

5.0.18 INVENTION ASSESSMENT COSTS means all historic outof-pocket costs and expenses related to the review, assessment and protection of the INVENTION DISCLOSURE and the INVENTION, including without limitation patent and copyright application costs and expenses, legal fees, filing fees, search fees, fees for legal opinions, patent maintenance fees, IP EXPENSES, and any other out-of-pocket transactional costs attributable to the INVENTION DISCLOSURE and the INVENTION

5.0.19 INVESTIGATOR means any University faculty member, emeritus faculty, visiting faculty or researcher, adjunct faculty, postdoctoral employee or trainee, or other employee, or an undergraduate or graduate student engaged in sponsored or unsponsored research.

5.0.20 IP EXPENSES means all out-of-pocket expenses incurred or accrued during the previous Fiscal Year by CTT arising out of or related to or in connection with the review, assessment, protection, licensing, defense, enforcement, or audit of intellectual property rights related to INVENTION DISCLOSURES, INVENTIONS, TANGIBLE RESEARCH PROPERTY, and copyrightable works, or the defense, enforcement or audit of licenses or other agreements related to INVENTION DISCLOSURES, INVENTIONS, TANGIBLE RESEARCH PROPERTY, or copyrightable works, including but not limited to: outside legal and patent agent fees and expenses; search fees and expenses; application fees; fees for legal opinions; government filing and maintenance fees; legal fees to defend or enforce intellectual property, license agreements, option agreements, confidentiality agreements, or other agreements related to the INVENTION DISCLOSURE, INVENTION, TANGIBLE RESEARCH PROPERTY or copyrightable work; fees and expenses to audit licensees and related agreements; and other out-of-pocket transactional costs related to patent, copyright, trademark and other intellectual property protection or licensing anywhere in the world. **REIMBURSED IP EXPENSES** means IP EXPENSES for which CTT received or accrued payment or reimbursement from a licensee, INVENTOR or third person before the end of the Fiscal Year. AGGREGATE UNREIMBURSED IP EXPENSES means all of the IP EXPENSES which remain unpaid and unreimbursed from a licensee, INVENTOR or third person at the end of the Fiscal Year, as shown in the accounting records of CTT (excluding accrued payments or reimbursements.)

5.0.21 MATERIALS means lab notebooks, records, drawings, sketches, photographs, radiographs or other images, models, biological specimens, chemical samples, or other materials needed to support the preparation, submission, prosecution, defense or enforcement of a patent in the United States or other applicable jurisdictions.

5.0.22 NET CTT INCOME FOR AN INVENTION means the ADJUSTED PROCEEDS FOR AN INVENTION, minus the PRO RATA SHARE of the AGGREGATE CTT OPERATING COSTS. If zero or a negative number, then there is no NET CTT INCOME FOR AN INVENTION. (As an example, if the ADJUSTED PROCEEDS FOR AN INVENTION equals \$273,125, the PRO RATA SHARE is five percent (5%), and the AGGREGATE CTT OPERATING COSTS equals \$4,500,000, the NET CTT INCOME FOR AN INVENTION equals [\$273,125 minus (0.05 x \$4,500,000)], or \$48,125.]

5.0.23 PATENT POLICY means this Patent and Tangible Research Property Policies and Procedures of the University of Pennsylvania, with any amendments to such procedures, if any, approved by the President from time to time.

5.0.24 PARTICIPATION AGREEMENT means a written agreement substantially in the form of Appendix A to the PATENT POLICY, setting out rights and responsibilities of University faculty, emeritus faculty, visiting faculty and researchers, adjunct faculty, postdoctoral employees and/or other salaried employees, students, and others under the University's policies and procedures, and confirming the automatic assignment of ownership of INVENTIONS covered under the PATENT POLICY, to the University.

5.0.25 PRO RATA SHARE means the ratio (expressed as a percentage) of the GROSS CTT REVENUES directly generated by and attributable to an INVENTION and/or TANGIBLE RESEARCH PROPERTY, as determined by CTT, compared to the entire GROSS CTT REVENUES, during a Fiscal Year. (As an example, if the GROSS CTT REVENUES directly generated by and attributable to an INVENTION total \$600,000 in a Fiscal Year, and the GROSS CTT REVENUES total \$12,000,000 in a Fiscal Year, the PRO RATA SHARE is five percent (5%).)

5.0.26 SIGNIFICANT EQUITY INTEREST means any EQUITY or other financial interest that when aggregated for the individual and the individual's spouse and dependent children exceeds \$25,000 in value, as determined through reference to public prices or other reasonable measures of fair market value, and does not represent more than five percent (5%) ownership interest in any single entity.

5.0.27 STAKEHOLDERS means shareholders, owners, members,

general partners, limited partners, or other owners or investors in an entity.

5.0.28 SUBSTANTIAL USE OF UNIVERSITY RESOURCES means the use of University funds, facilities, equipment, or other resources significantly in excess of the norm for educational and research purposes in the Department or School in which the faculty member(s) holds his or her (their) primary appointment(s) or in which a staff member or student is enrolled or employed. Academic year salary, office, usual library resources, usual secretarial and administrative staff resources or usual computer equipment, among other things, are not regarded as constituting "substantial use of University resources." Any question about what constitutes substantial use of University resources should be referred to the Vice Provost for Research.

5.0.29 TANGIBLE RESEARCH PROPERTY means unique research products or tools, such as biological materials or chemical moieties, whether or not patentable or otherwise protectable using intellectual property laws. Categories of biological material include organisms, cells, viruses, cell products, cloned DNA, as well as DNA sequences, mapping information and crystallographic coordinates. Some specific examples of biological materials include specialized and/or genetically defined cells, including normal and diseased human cells; monoclonal cell lines; hybridoma cell lines; microbial cells and products; viruses and viral products; recombinant nucleic acid molecules; DNA probes; nucleic acid and protein sequences; and transgenic mice or other animals. Categories of chemical moieties or engineered products include sample compounds, reagents, intermediates, models, sensors, devices, equipment, computer hardware or firmware, diagrams, or computer media.

5.0.30 TANGIBLE RESEARCH **PROPERTY GENERATION COSTS** means all of the documented and verifiable direct costs and expenses attributable or allocated to the generation of the quantities of TANGIBLE RESEARCH PROPERTY distributed which led to the receipt of GROSS CTT REVENUES from such TANGIBLE RESEARCH PROPERTY. As an example only, the costs of raw materials, supplies, reagents, specialized equipment, and other direct costs and expenses necessary to generate the quantity of TANGIBLE RESEARCH PROPERTY constitutes TANGIBLE RESEARCH PROPERTY DIRECT GENERATION COSTS. Salaries, overhead, and equipment which is otherwise used for teaching or numerous research purposes is not part of TANGIBLE RESEARCH PROPERTY DIRECT GENERATION COSTS. (Any disagreement among the INVESTIGATORS and CTT regarding the calculation of TANGIBLE RESEARCH PROPERTY DIRECT GENERATION COSTS may be appealed to the APPEALS BOARD.)

5.1 Review of Policies and Procedures. The EXECUTIVE COM-MITTEE together with the Vice Provost for Research shall review the PATENT POLICY (including Appendix B), from time to time to determine whether it is accomplishing its intended purposes and is in conformity with applicable laws and regulations, including intellectual property laws. The EXECUTIVE COMMITTEE shall make recommendations for amendments or other changes to the Provost and the Faculty Senate, who shall confer with the President.

5.2 Disputes Under Policies and Procedures. Except as expressly set forth otherwise in this PATENT POLICY, disputes arising from the interpretation or administration of the PATENT POLICY (excluding disputes arising from Article 3) may be referred by any interested party to the Chair of the APPEALS BOARD and the Office of the Vice Provost for Research, who will promptly notify the IPA. The APPEALS BOARD shall first determine whether it has jurisdiction to hear any such dispute before proceeding. The APPEALS BOARD shall provide an equitable mechanism for the review and resolution of disputes brought before it, and shall have the authority to make a judgment with respect to such disputes. The APPEALS BOARD shall use reasonable efforts to make a judgment with respect to any dispute within thirty (30) days after having any such dispute referred to it. Any judgment of the APPEALS BOARD may be appealed by any interested party to the Vice Provost for Research. The ice Provost for Research shall consider the matter de novo, and shall use

reasonable efforts to review any such appeal and make a judgment with respect to any appeal, within thirty (30) days after having any such dispute referred to him or her. Any judgment of the Vice Provost for Research may be appealed to the President, who will make a final decision for the University

University.

5.3 No Change to Relationships. Nothing in this PATENT POLICY or the actions taken in connection with INVENTIONS, TANGIBLE RESEARCH PROPERTY, or EQUITY, is intended to or shall be interpreted or deemed to create a fiduciary, trust, or agency relationship between the University or any of its units or personnel, and any faculty, staff, student or INVENTOR.

Appendix A. Participation Agreement

In order that the University may fulfill legal and contractual obligations to sponsors of research, including but not limited to the federal government, and in consideration of my employment by the University, or my participation in sponsored research, or my use of funds, facilities, or other resources provided by the University, I hereby agree as follows:

- 1. I have read, and I understand and agree that I am bound by, the terms of the Patent and Tangible Research Property Policies and Procedures of the University of Pennsylvania, as well as by the terms of any revisions or amendments adopted by the President and/or the Trustees of the University of Pennsylvania (collectively, the "Patent Policy"), effective retroactively to the first date of my employment, appointment or matriculation, and/or participation in sponsored research, and/or SUBSTANTIAL USE OF UNIVERSITY RESOURCES ("Start Date"). I understand that words appearing as all capitalized letters in this Agreement are used as defined in the Patent Policy.
- 2. I agree to report to the INTELLECTUAL PROPERTY ADMINISTRATOR ("IPA") any INVENTION which is conceived or reduced to practice in the course of my employment at the University, or from work directly related to professional or employment responsibilities at the University, or from work carried out on University time, or at University expense, or with SUBSTANTIAL USE OF UNIVERSITY RESOURCES under grants or otherwise. I hereby irrevocably assign to The Trustees of the University of Pennsylvania all right, title and interest in and to any and all such INVENTIONS, effective retroactively to my Start Date.
- 3. I acknowledge that any TANGIBLE RESEARCH PROPERTY, whether or not patentable, which is made in the course of employment at the University or from work directly related to professional or employment responsibilities at the University, or from work carried out on University time, or at University expense, or with SUBSTANTIAL USE OF UNIVERSITY RESOURCES under grants or otherwise is the property of the University I hereby irrevocably assign to The Trustees of the University of Pennsylvania all right, title and interest in and to any and all such TANGIBLE RESEARCH PROPERTY, effective retroactively to my Start Date.
- 4. I understand that the University incurs binding obligations to sponsors under the terms of sponsored research agreements. When I participate in sponsored research, I understand that it is my responsibility to ascertain and abide by the terms of the sponsored research agreement as it relates to me. In particular, when engaged in outside activity, such as consulting, I recognize my duty to protect the University's obligations to its research sponsors and its rights pursuant to the PATENT POLICY.
- 5. I also understand that on occasion University policy or the University's obligations to research sponsors may require that I assign my interest in copyrightable materials to the University. In such cases, I hereby irrevocably assign all right, title and interest in and to such materials and the copyrights therein, if any, to The Trustees of the University of Pennsylvania, effective retroactively to my Start Date. I further understand that, in agreements with research sponsors, the University seeks to retain copyrights for its faculty.
- 6. I will cooperate fully with the University in the preparation, filing and prosecution of patents, in the registration of copyrights and in the preparation and execution of all documents necessary or incidental thereto, including but not limited to any additional written assignments deemed desirable by the University to further evidence my legal assignment of ownership or otherwise facilitate protection of the intellectual property.
- 7. I accept the provisions for the sharing of amounts and EQUITY in the PATENT POLICY and the then-current Policy Relating to Copyrights and Commitment of Effort for Faculty (the "Copyright Policy").
- 8. I am under no obligation to any person, organization or corporation with respect to any INVENTION(S), TANGIBLE RESEARCH PROPERTY or copyrightable materials which are, or could be reasonably be construed to be, in conflict with this Agreement, except as set forth in writing in the signed attachment to this letter (if any).
- 9. This Agreement and the assignments and obligations are effective as of my Start Date, and apply to any INVENTION(S), TANGIBLE RESEARCH PROPERTY, and copyrightable materials made during the time I am employed by the University, hold an appointment, continue to matriculate, participate in sponsored research, or otherwise make a SUBSTANTIAL USE OF UNIVERSITY RESOURCES.

Signature:	
Printed Name:	
Date:	

Appendix B. Rules Governing EQUITY Transactions

- **B.1 Licenses in Consideration of EQUITY.** The principal purpose of licensing by the University is to promote the development of technologies to serve the public interest. If after a diligent effort to identify prospective licensees, the IPA determines that the public interest is best served by a license in consideration of EQUITY, the IPA may negotiate such a license on behalf of the University, following consultation with the Vice Provost for Research, the INVENTORS, the General Counsel (or his/her designee), the Treasurer (or his/her designee), and the University Conflict of Interest Standing Committee. The IPA should be satisfied that the licensee can demonstrate management and technical capability, and that it has the financial resources necessary to meet its developmental objectives and its obligations to the University. The IPA may accept EQUITY in the licensee for the University in lieu of or in addition to license or other fees, provided that the EQUITY represents a fair valuation for the technology. The IPA shall include in each license measures of performance that must be met in order to maintain the license granted by the University.
- **B.2 Disclosure of EQUITY.** The University will require the prospective licensee to disclose all EQUITY offered to the University (and other institutions or individuals which may co-own an INVENTION with the University) in consideration for the license agreement. In addition, the prospective licensee will be required to disclose in writing to the IPA and the Treasurer the specific terms and conditions associated with such EQUITY, and the current and *pro forma* capital structure of the venture. Furthermore, the prospective licensee and the INVENTORS must disclose to the IPA and the Treasurer in writing the EQUITY to be issued to INVENTORS for their role as founders, consultants, or otherwise.
- **B.3 Conflicts of Interest in License Agreements Involving EQUITY.** License agreements involving EQUITY must be structured to protect the University from liability and to avoid conflicts of interest. Prior to the University executing any agreement, the INVENTOR(S) shall disclose to the IPA and the University Conflict of Interest Standing Committee, any existing or proposed consulting agreement between the INVENTOR(S) and the prospective licensee or any other consulting agreements with other entities that have potential for conflicts of interest. Upon the recommendation of the Vice Provost for Research, the University and the relevant Deans may impose limitations on the proposed license agreement, associated sponsored research agreement, consulting agreement between the INVENTOR and the licensee, or other agreements. In addition, the University, Deans or Chairpersons may create an oversight mechanism for the relevant INVENTORS.
- **B.3.1 Board Participation and Fiduciary Roles.** In general, the University will not accept a position on the board of directors (or other comparable governing entity) of the licensee, but may accept and exercise observer rights on such boards or comparable governing entities. Exceptions to this policy require the approval of the Executive Vice President of the University in consultation with the IPA and the General Counsel. As a matter of policy, INVENTORS may not serve on the board of directors (or other comparable governing entity) of the licensee, or in any other fiduciary capacity during the time their University research is sponsored by the licensee. In general, INVENTORS may accept a seat on scientific advisory boards providing that membership on such a board does not create a fiduciary responsibility to the licensee or any of its STAKEHOLDERS.
- **B.3.2 Minority Ownership.** The INVENTORS (and members of their families) together may not be majority STAKEHOLDERS of the venture at the time that the license agreement is negotiated and thereafter.
- **B.3.3 Licensee Representation.** In license negotiations with the University, the prospective licensee must be represented by a party other than an INVENTOR or a member of the INVENTOR'S family.

- **B.4 Direct Personal Ownership of EQUITY.** The University generally requires that the EQUITY provided to INVENTORS from the EQUITY POOL must be issued directly to the INVENTORS at the time the EQUI-TY is issued. The INVENTORS will be responsible for retaining their own business advisors, legal counsel and tax counsel. INVENTORS are responsible for all financial, tax and legal consequences related to the EQ-UITY they receive. The University Conflict of Interest Standing Committee reserves the right to require that any EQUITY issued to INVENTORS by the licensee be held in a "blind trust" for a defined period of time. An INVENTOR who receives EQUITY from the EQUITY POOL or from the licensee outside of the EQUITY POOL generally will receive a reduced INVENTORS PERSONAL SHARE of ADJUSTED CTT REVENUES for the INVENTION, pursuant to Section 2.3.3.1 above, to avoid an unintended incentive to structure transactions whereby the INVENTORS retain 100% of the proceeds from their share of the EQUITY POOL, and obtain 30% of the proceeds to the University when the University liquidates EQUITY held by the University. Under rare circumstances, the University may agree to accept all shares of the EQUITY POOL including INVENTORS shares, providing that all INVENTORS and other institutions release the University in writing from any liability associated with the management, investment and ownership of the EQUITY. In such cases, the Investment Board of the University will control the EQUITY. Any income received by the University from EQUITY held on behalf of INVENTORS will be distributed among INVENTORS in accordance with Section 2.3.4 of the Patent and Tangible Research Policies and Procedures.
- **B.5 Management of EQUITY.** Any EQUITY received by the University under a license agreement will be held by the Office of the Treasurer until such time that the University's Investment Board decides to liquidate such EQUITY.

APPENDIX C: HYPOTHETICAL EXAMPLE

GROSS CTT REVENUES for FY 2010 equals \$12,000,000

GROSS CTT REVENUES for FY 2010 attributable to the XYZ INVENTION equals \$600,000

The **PRO RATA SHARE** equals 5% (\$600,000 divided into \$12,000,000 equals 0.05)

AGGREGATE UNREIMBURSED IP EXPENSES for all of CTT for FY 2010 equals \$2,500,000

The **PRO RATA SHARE** of **AGGREGATE UNREIMBURSED IP EXPENSES** attributable to the XYZ INVENTION equals \$125,000 (0.05 times \$2,500,000 equals \$125,000).

Thus, the **ADJUSTED CTT REVENUES for the XYZ INVENTION** equals \$475,000 (\$600,000 minus \$125,000 equals \$475,000).

The INVENTORS PERSONAL SHARE equals 30% of ADJUSTED CTT REVENUES for the XYZ INVENTION, or \$142,500. (\$475,000 times 0.3 equals \$142,500).

The INVENTORS RESEARCH ACTIVITY SHARE equals 12.5% of ADJUSTED CTT REVENUES for the XYZ INVENTION, or \$59,375. (\$475,000 times 0.125 equals \$59,375).

The **ADJUSTED PROCEEDS FOR THE XYZ INVENTION** equals \$273,125 (\$475,000 minus \$142,500 and minus \$59,375).

AGGREGATE CTT OPERATING COSTS for FY 2010 equals \$4,500,000

The **PRO RATA SHARE** of **AGGREGATE CTT OPERATING COSTS** attributable to the XYZ INVENTION equals \$225,000 (0.05 times \$4,500,000 equals \$225,000).

Thus, the **NET CTT INCOME for the XYZ INVENTION** equals \$48,125 (\$273,125 minus \$225,000).

The **DEPARTMENTS OF INVENTORS SHARE** equals 20% of the **NET CTT INCOME for the XYZ INVENTION**, or \$9,625 (\$48,125 times 0.2 equals \$9,625.)

The SCHOOLS OF INVENTORS SHARE equals 40% of the NET CTT INCOME for the XYZ INVENTION, or \$19,250 (\$48,125 times 0.4 equals \$19,250.)

The UNIVERSITY RESEARCH SHARE equals 40% of the NET CTT INCOME for the XYZ INVENTION, or \$19,250 (\$48,125 times 0.4 equals \$19,250.)